THE CULTIVATOR.

TO IMPROVE THE SOIL AND THE MIND.

NEW SERIES. ALBANY, OCTOBER, 1852. VOL. IX.—No. 10.

Obituary of Prof. Norton.

MISFORTUNES never come singly. We had scarcely laid down our saddened pen, and cast an earnest look into the already darkened future, when another, in the bloom of his maturity, was called hence. Calmly, peacefully, trustingly, he has passed to the land of his faith, to the home of the blest, leaving regret to border the pathway he had trod, and tears to water in vain the hopes which his usefulness had awakened. Prof. NORTON is dead, aged only thirty.

"Those the Gods love, die young,
But they whose hearts are dry
As summers' dust, burn to the socket."

The lives of the truly great are always instructive, and could we read them rightly, would teach us useful lessons, both in the sublime results which attend their labors and in the mode by which their greatness has been attained. While one whose talents and accomplishments have distinguished him among the wise men and scholars of his day lives, we admire only the proofs of his genius and ability; but when such an one is removed from our midst, we naturally inquire into the elements of his power. It is in this way that, when one is dead, he yet speaketh—speaks, not only in word and in deed, but in the more silent operations of the mind, which are marked in the successive grades of culture by which one rises to eminence.

Deeply as we deplore the loss of the most practical agricultural writer and thinker of the preseot time—one from whence the farming community expected much, and whose efforts promised more permanently beneficial results than those of any other man, we shall find that his life, though short, is full of instruction and replete with interest.

From his youth, Mr. NORTON had been more or less conversant with the practice of agriculture, and as is naturally the case with an inquiring mind, the apparent lack of system, and ruinous waste often seen, led to thought and investigation. After having pursued the study of chemistry with the ablest professors in this country, he visited Europe, in the summer of 1844, for the purpose of pursuing his studies farther than could be done here, and also to extend his observations. Mr. NORTON accompanied Prof. JOHNSTON on a tour through Scotland, the results of which appeared in his letters published in this journal. These letters, which were continued regularly during his absence, were his first introduction to the public as a writer, and established his reputation as a careful observer, a close reasoner, and a sound thinker. During his stay in Scotland he enjoyed the closet intimacy with Prof. JOHNSTON, and pursued his studies under his direction at the Laboratory of the Ag. Chemical Association. The analyses furnished by him from time to time, show the accuracy of his mind and his superior industry, and his notes on Prof. JOHNSTON's lectures are valuable abstracts, forming almost a complete text book of Agricultural Science. All his communications to THE CULTIVATOR are of permanent value, and show the condition of Ag. Science in Scotland at that time.

In the fall of 1845, he made a tour on the Continent, for the purpose of visiting some of the most celebrated laboratories, and his letters were for a time discontinued. Shortly after, he returned to this country, when he received an appointment to a professorship of chemistry, as applied to agriculture, which had been created at Yale College. Mr. NORTON wished to perfect himself in chemistry before entering upon his duties as Professor, and with this in view he sailed again for Europe in the fall of 1846. Here we notice a prominent characteristic of Prof. NORTON. There was nothing of pretension in his nature—he was unwilling to assume a responsibility till he felt himself fully equal to it. Instead of being vain of the honor thus early bestowed on him, he goes manfully and earnestly to work to lay, deep and strong, the foundations of a science, of which the first rudiments were scarcely known.

In the year 1846, a premium of fifty sovereigns ($250) was offered by the Highland and Agricultural Society of Scotland, for the best analysis of the oat. The chemical constituents and the physiology of the growth of this plant, were little known, and a scientific analysis had never been attempted. Mr. NORTON, still a student in the laboratory, and in competition with several learned chemists, obtained this premium. This is more remarkable from the fact that he was an American, and unknown to the scientific world. The article contains thirty-nine tables, showing the composition of the different parts of the oat, and at several stages of its growth, and displays a vast amount of research and an untiring industry. In the conclusion of the article, Mr. NORTON remarks—"I may be permitted to say, that the extent of this investigation, and the many points which I have been compelled to leave undetermined or doubtful, after eighteen months of constant labor, must convince those who entertain false ideas of the time and patience necessary for chemical researches of this kind, that they have erred in supposing the chemist able to do in a few days or weeks

what can only be effected by the labor and study of many successive years."

How strangely does this language of a successful scholar contrast with the assertions of later, not to say riper chemists, who arrive at the most profound conclusions with an astonishing facility, and, in advance of public opinion, award to themselves the highest eulogiums.

During his stay in Europe Mr. Norton studied with Prof. Mulder at Utrecht, Holland, one of the greatest physiologists and chemists of his day. His letters from Holland are admirable pictures of the rural aspect of the country. Upon his return to this country in the fall of 1847, he entered upon his duties at Yale. Though attendance on the lectures in his department was voluntary, and comparatively little attention had been paid to Agricultural Chemistry by the young men in our colleges, he soon gathered a class of students, which was gradually increasing to the time of his death. His laboratory was, in fact, the only place in this country where the principles of science as applied to agriculture, were thoroughly taught.

The cares of his professorship were not his exclusive occupation. A treatise on Scientific Agriculture, which was written as a Prize Essay, and took a premium of one hundred dollars, offered by the N. Y. State Ag. Society, and was subsequently published as a text book for schools, was prepared by him in 1850. This little work embodies all the fundamental principles of Agricultural Science, so far as well established, and has been widely circulated.

Prof. Norton also wrote an appendix to Stephens' Book of the Farm, together with notes, such as to adapt it to this country. In the Cultivator for January, 1850, Prof. Norton commenced a series of letters, which were continued without interruption till his sickness. These communications were of such a practical nature, and so well adapted to the wants of farmers, that they constituted one of the chief attractions of the Cultivator. His views of scientific farming were not of that ultra, radical sort that empirics love so well to dwell upon, but rather the more rational and common sense ideas, which a knowledge of the real condition of our farmers and their interests, combined with sound discipline of mind, would naturally form. If his style lacked ornament, it was because the frame work he had to build was too vast a structure to admit of decoration—if he rarely called imagination to his aid, it was because he was too intent upon the stern realities of things—if he seldom manifested any great enthusiasm, it was because he was conscious of having only entered on a work whose triumphs still lay in the unexplored future. Thoughtfully, carefully, steadily he was laying the foundation on which, in after years, he might rear as proud a monument as science ever wrote her name upon. Agriculture in this country had much to hope for in his efforts; for he bent the undivided energies of his mind to its advancement. His whole soul was in the work—he had the confidence of every one, and with no other person could the interests of our rural population be so safely entrusted as with Prof. Norton. Upon whom will his mantle fall? Who will arise to guide through the shoals and quicksands of reckless imposture, the noble ship of American industry?

We have not space enough to speak of particular articles of Prof. Norton's, nor to notice the many addresses which he delivered at intervals before Agricultural Societies and the community generally. Suffice it to say, that everything he wrote, and everything he said, was marked by the same uniform prudence, the same careful judgment, which characterises the man. He was never led into error—never ran head-long into chimeras and fanaticism, and so was never obliged to retract what he had said, or retire from positions he had taken.

When the project of the University of Albany was broached in 1851, Prof. Norton entered warmly into the plan. He had felt deeply the need of such an institution, and knew the obstacles which lay in the way of the students of Agriculture and the Natural Sciences. He advocated it as the best means of securing a permanent basis to our Agricultural Interests, and forming a nucleus for science in this country, The lectures, which he delivered in the winter of 1851-52, before a class which was gathered in Albany, were popular and instructive. He had a rare faculty of expressing in plain language his thoughts on the most abstruse subjects, and also of holding the attention of an audience to his theme. The severe labor, attendant on delivering courses of lectures at New Haven and at the University of Albany, materially impaired his health, and before the close of his lectures, he was obliged to leave for a warmer climate. Strong hopes were entertained, at first, of his recovery, but Providence had otherwise ordered. After his return to the north, he sank slowly to his end. Though conscious that he must leave a world which was just opening to his ambition, and a circle of friends who fully appreciated his worth, he was cheered on by that christian hope which had been his guide and solace during life. The exchange of worlds is for him a happy one, but his loss will cast a shadow on many a heart.

His character was in the highest degree estimable, and his virtues were of that quiet, unobtrusive nature, which steal so readily into the affections of every one. He was eminently fitted to grace the social circle, and his pleasing, artless manner, winning address, and animated style of conversation, made his society peculiarly desirable.

The personal friends of Prof. Norton mourn one who was endeared to them by the closest intimacy,—the scientific world, one of their brightest lights, and the readers of the Cultivator, a most valued correspondent. Thus in the space of five short weeks, have we been called to write the obituaries of the two most prominent Horticultural and Agricultural writers of the day, men whose places cannot well be filled, and whose memories will long be cherished by every lover of his country.

High Price of Winter Pears.—Robert Thompson states in the Journal of the London Horticultural Society, that in January the scarcity of winter pears is such, that Jersey Chaumontels [an old but good pear] make their appearance, imported at the high price of not unfrequently *five pounds per hundred.* This is more than twenty-four dollars—or about twenty-five cents each by the hundred. Would not an acre or two of winter pears afford some profit, if rightly managed? If four specimens sell for a dollar at midwinter, what would fine Easter Beurres bring at the opening of spring?

The State Fair at Utica.

It is gratifying to observe the continued improvement in the value and utility of our State Fairs. Instead of forming mere shows for the attraction of idle curiosity, they are yearly becoming more useful as disseminators of valuable knowledge. Instead of being mere carnivals, they are assuming a high rank as schools of rural art. In accordance with this improvement, less attention than formerly is given to show in preparation, and more to convenience and order. When we look back some years, and compare our present with former fairs, we cannot avoid a strong feeling of gratification at the general advancement which has been made, both in the general plan, and in the details of management. When we remember the great and multifarious machinery which must be set in motion for conducting the business of a single annual exhibition, the many thousands of objects to be entered, labelled, and arranged, and the many ten thousands of persons admitted to view them, a feeling of admiration, rather than of censure, should be the result. So long as those who visit them regard the aquisition of the vast amount of knowledge they furnish as their chief attraction and value, little dissatisfaction will be felt when they do not happen to receive premiums; and remembering that when many ride the same horse, all cannot be foremost, they will derive a high degree of pleasure in so easily availing themselves of the superior improvements which others have made.

The grounds at Utica were unusually spacious and commodious. About fifty acres of very smooth land had been enclosed, and ample room thus afforded for the general distribution of the vast crowd. With one exception, the halls for exhibition were broad tents, which answered the purpose of both convenience and economy. A free use of the water cart prevented the annoyance of dust, and contributed much to the comforts of the spectators.

The exhibition of Cattle was large. There were 147 entries and about 550 animals upon the grounds. A distinguishing feature was the large display of Devons, among which there were so many beautiful animals, that it is quite out of the question to point out those which pleased us the best. We well remember when but a few years since, the only exhibition of this breed consisted of the herds of but one or two exhibitors—now, large numbers were sent from nearly every portion of the state. The Durhams were less numerous, but furnished some very fine animals. S. P. Chapman's celebrated bull "Halton," was a general favorite. Several other fine animals were observed in the herds of J. M. Sherwood, Wm. A. Brown, W. Bullock, and others. Of Herefords, fine animals were exhibited by W. H. Sotham, of Geneseo, and Erastus Corning, Jr., of Albany. A very interesting herd of grade Herefords, bred from the stock of Wm. H. Sotham, consisting of about fifty head, was exhibited by George Clark, of Otsego county. They comprised cows, calves, heifers, steers and working oxen, and were in ordinary condition, having never been pampered nor highly fed. Of Ayrshires, E. P. Prentice, of Albany, J. C. Tiffany, of Coxsackie, and James Brodie, of Ellisburgh, were the principal exhibitors. A yearling bull, belonging to the latter gentlemen, attracted a great deal of attention on account of his fine form, appearing, as a by-stander remarked, "as if he had been turned in a lathe." The forty head of Kentucky cattle, grade Durhams, from John W. Taylor were also an interesting exhibition. A large collection of native working oxen were on the grounds, among which we observed ten very fine yoke from James S. Wadsworth, of Geneseo, fifteen yoke from George Sheldon, of Conquest, Cayuga county, and about forty yoke from different individuals in the town of New-Hartford. The native red three-year steers of H P. Potter, exceeded in symmetrical form any animals of this kind we had seen.

There were 239 entries of Horses. The finest thoroughbred stallion was admitted to be J. B. Burnet's old horse "Consternation"—there was also a beautiful two year colt from this horse, about two years old. "Gen. Gifford," and a colt of his stock owned by Chas. W. Ingersoll of Lodi, Seneca county, were among the best Morgan horses.

The exhibition of Sheep was good. There was a fine exhibition of long wools, and some excellent French Merinos. A ram of the latter breed, owned by J. D. Patterson of Chautauque county, was a monster. We had the curiosity to measure him, and although a handsome, well-proportioned animal, his head was found to be a foot long, his horns each over four inches in breadth, and from the tip of his nose to the beginning of his tail, full six feet. The wool was observed to be quite fine, more so than usual on animals of this class. He is said to have sheared about thirty pounds, and to require less food for the wool yielded, than common sheep. Whether the strength, and the consequent difficulty of handling sheep of such size, would be a serious objection to their general introduction, farmers can best judge for themselves.

The Swine were not numerous but contained some fine animals.

The Poultry afforded quite an interesting display to *fowl-amateurs*. They were so numerous that their cages occupied the four sides of a large barn situated within the enclosure, and around which a temporary veranda was built for their protection from the weather. The largest exhibitor was D. P. Newell, of Rochester, who took a large share of the premiums. There were many beautiful specimens from other individuals.

There was a good display of Agricultural Implements. A greater number of reapers and mowers were on the ground than at any previous fair, and they included most of those which were tried last summer at Geneva. J. Rapalje, of Rochester, presented the largest collection of plows, harrows, straw-cutters, and other implements. Emery & Co., of Albany, exhibited an improvement in Hovey's straw-cutter, which is now probably the best straw-cutter with knives on a cylinder. The knives being thinner (and stiffened by a twist) are more easily sharpened; being set without any central cylinder, they are within smaller compass; and, diverging considerably, never become clogged; while the same work is done with a less costly machine. This straw-cutter was found to work with great ease. It is admirably adapted to cutting hay and straw, but not corn-stalks. A portable cider-mill, exhibited by D. F. Phillips, of

Ashland, Ohio, was remarkable for its compact form, neatness, and efficiency.

The exhibition in Dairy Hall, although not large, furnished many excellent productions. The two large cheese of J. Williams, Rome, weighing over 500 lbs. each, attracted much attention, and the committee for their examination stated that they were of the highest quality, being fully equal in this respect to any of the smaller cheeses. We observed in the same tent, besides a large collection of grains and seeds, a handsomely arranged collection of English grains from Charlwood & Co., of London, and a neat case of the varieties of Indian Corn from R. L. Colt, of Patterson, New-Jersey.

A large portion of the contents of Mechanic's Hall consisted of the *stoves*. If these do not soon reach perfection, it will not perhaps be for a want of ingenuity and numbers in their manufactures. We observed that most of them, and including some of the neatest specimens, were new inventions, being marked with the year 1852.

Manufacturer's Hall contained as usual a very large miscellaneous collection, including many brilliant specimens of skill, of which our present limits forbid an enumeration.

The exhibition of *vegetables* was the best that has ever been made at a State Fair. The tables in the tent devoted to them, were literally piled to their utmost capacity, with a profusely rich collection of every thing the kitchen garden produces, of uncommonly fine and large growth. Among many contributors, we observed more particularly the names of H. G. Dickerson of Lyons, and N. Culver of Arcadia, both in Wayne county, attached to very fine specimens.

Floral Hall, as usual, formed a very interesting part of the exhibition. The large tent, 140 long, and nearly 100 wide, devoted to fruit and flowers, was arranged internally with a simple view to the convenience of exhibitors, and the accommodation of spectators, with no costly expenditure for the sake of show—contrasting most favorably in this respect, with the arrangements in some former years. In the present instance the outer portion of the tent was left entirely open for the free passage of the multitude, the fruits and flowers occupying the central part, and thus in a great measure obviating the squeezing and "boring with elbow-points," always resulting from a confined passage.

Among the contents of Floral Hall, the collections of pears exceeded any thing of the kind in former years. Hovey & Co. of Boston, presented 104 varieties, and Ellwanger & Barry 180 varieties. Both of these contained some sorts of great rarity. Henry Vail, of Troy, exhibited 70 varieties, the largest amateur collection. J. Morse of Cayuga, presented 60 sorts, and T. C. Maxwell & Co., of Geneva, C. Reagles, of Schenectady, Thorp & Co., of Syracuse, and A. Frost & Co., of Rochester, about 30 to 40 sorts each. As indicative of those varieties most generally held in high estimation, we name the following, which were found to a greater or less extent in all these collections:—Bartlett, Belle Lucrative, Dix, Autumn Paradise, Flemish Beauty, Bosc, Gray and White Doyenne, Doyenne Boussock, Diel, Urbaniste, Onondaga, Louise Bonne of Jersey, Seckel, Glout Morceau, Stevens' Genesee, Gansel's Bergamont, Fulton, Passe Colmar, and Winter Nelis. Apples were in fewer numbers than usual—the largest collections were 60 sorts from Ellwanger & Barry, 82 from J. J. Thomas, 50 from J. Morse, and lesser quantities from a few others. Some fine specimens of the Hawley were exhibited by James H. Watts, of Rochester.

The show of peaches was very meagre, the crop through most parts of the state having proved a failure. The only fine specimens that attracted much attention were from J. Morse, of Cayuga, and H. G. Dickerson, of Lyons—the former presenting about 30 sorts—and some very fine Early Crawfords were observed in the collection of the latter. Many beautiful dishes of plums were contributed by citizens of Utica, which appears to be an admirable locality for this fruit, the trees being heavily loaded with their crops. The largest exhibition of plums was nearly 40 varieties, from C. Reagles, of Schenectady.

The finest grapes were those from H. L. Suydam, of Geneva. Bunches of Black St. Peters weighed three pounds, and of Zinfindel, over two and a half pounds. These were raised in a small "cold house," of very simple construction, on the sunny side of his carriage house, and which he manages entirely with his own hands, during the few minutes each day, of leisure from business. He ascribes his great success to the free use of soap soads as a watering to his inner border, which is entirely suspended as soon as ripening commences, and a high heat given at the same time, ranging often as high as 115° Fah. Fine specimens of grapes were also exhibited by S. H. Ainsworth, of West Bloomfield, J. Greig, of Canandaigua, A. Frost & Co., of Rochester, and H. Vail, of Troy.

Among the Flowers were some fine Dahlias, Verbenas, and Fuchsias, which constituted the chief portion of the exhibition. Most of the greenhouse plants were contributed by the nurserymen of Rochester and Syracuse

On the last day of the Fair, several thousands assembled under a broad tent, to hear the annual address from Horatio Seymour, of Utica. It was able, interesting, and occasionally eloquent. It was devoted chiefly to the importance to farmers of *well directed* application of knowledge and of physical means, and urged with great force, the indispensible necessity of exertion, energy, and enterprise in the cultivators of the soil, if they would keep pace with the advancement of the present day, and the competition with which internal and foreign commerce is surrounding them.

Corn Curing.

Eds. Cultivator—In the July No. I see a call for experiments in corn raising, &c. I will state for the benefit of your correspondent, H. W., of Ira, N. Y., and others who wish to get the most sound corn, without regard to the stalks for fodder. Last year the season was short at both ends for the corn crop, being wet and cold in the spring, and frost early in the fall, and many of the farmers in my neighborhood had not one-half of a crop of sound corn.

I planted some four acres on high land descending to the south and east; there was a strip across the piece, some two rods wide, too wet for corn in a wet season;

when my corn was fit to cut up at the root, there was some twelve or fourteen rows across the piece, that to appearance had not a sound ear of corn. I left those standing till the corn cut by the root was cured sufficiently to husk. I then cut the standing rows at the ground, and carried it in for husking; contrary to my expectation, the fourteen rows were as sound as any portion of the crop, and ready for cribbing up—while that cut by the root before any frost, I had to spread to dry before I could put it in crib safely. From my experiments, I conclude that we may get more sound corn, when the crop is late, by letting it stand and cure in the hill, but the fodder is not of much value. My corn was cut up the 25th and 26th of September, and drawed in for husking the 18th and 20th of October; had an average crop for my vicinity, of 25 bushels of sound shelled corn, to the acre. B. H. M. *Morris, Otsego co., N. Y., July* 20, 1852.

The Vermont State Fair.

The second exhibition of the Vermont State Agricultural Society was held at Rutland on the 1st, 2d, and 3d of September. When a year ago the first impromptu gathering of Vermont farmers was announced, its success was considered quite problematical. There have been for a long time many intelligent and enterprising farmers in the Green Mountain State, but the interest in improved culture had not become general enough to justify any competition with the older states. The farmers felt too much pride to throw open to the gaze of an emulous brotherhood the products of their hills and valleys, and their mechanical skill, when aware that they must fall below the standard of states less rich in natural resources. This feeling has been so far overcome—thanks to the well-timed efforts of far-seeing and ambitious men that a State Agricultural Society has been formed, and without the incitement of premiums or the hope of reward, the farmers came, strong in numbers, and stronger still in purpose, to their fair. The result was gratifying in the extreme, and none expressed so much surprise at the character of the exhibition as Vermonters themselves. Their mountains had interposed a barrier to their acquaintance, and now, when their railroads had brought them around these tree-crowned summits, and together in generous rivalry, they seemed agreeably disappointed in each other's prosperity.

The display of Agricultural Implements and the products of mechanic art, was quite limited; yet on the whole creditable. Manufacturers from other states were well represented. The Endless Chain Horse Power of H. L. Emery of Albany, N. Y., and the Mower and Reaper of J. H. Manny, of Illinois, attracted considerable attention.

One of the most interesting displays was that of iron ore, manganese, fire clay, &c., by the Brandon Iron Co., together with specimens of manufactured articles, which reflect credit on the taste and skill of the gentlemen concerned. The same company exhibited a specimen of fossil wood, called lignite, which is at present exciting considerable interest in the scientific world. A bed of this lignite has been discovered, which has been excavated to the depth of eighty feet, without finding its bottom, and running in spurs to the surface of the ground. It is used successfully as fuel in driving an engine, burning freely, though leaving a large proportion of ash for its bulk.

Fine samples of flint and other ware were shown by the Bennington Co., which in point of finish, variety, and beauty of form, cannot be outdone.

The show of flowers, drawings, paintings, and needle work, though lacking in variety, displayed much taste and proves that experience only is needed to make Vermont equal to her sister states in this department of fine arts.

It was easy to see that the farmers prided themselves most on the superiority of their horses and sheep. The horses formed the great centre of attraction, and, we think, fully deserved the praise so freely lavished on them. We have never seen better horses, whether speed, bottom, action, or beauty, be regarded. As the well-trained and high spirited animals moved round the track, we were inclined to decide in favor of each successive competitor for the good will of the admiring crowd.

After the speech of Mr. Seward on Thursday, the famous Black Hawk, rode by Mr. David Hill, as vigorous and active as ever, followed by fifty or more of his colts, many of which compare favorably with their sire, and the Green Mountain Morgan, rode by Mr. Silas Hale, also supported by a numerous progeny, and other animals of the same breed, passed in procession twice round the course, forming the most splendid display of horses, probably ever witnessed in this country. On the afternoon of Friday, the fair was closed by the ceremony of crowning Black Hawk and the Green Mountain Morgan with wreaths of flowers, which had been provided by the ladies. The animals wore their prizes with becoming dignity and pride, and as they moved off with their honors, the air rung with cheers for the two "best horses in the world." The rivalry in displaying to the best advantage the good points of horses is in itself well enough; but we were pained to observe that *jockeyism* was quite too prevalent among the young men. When they abandon the ordinary vocations of the farm to train *fast horses*, the sterling interests of agriculture will languish, and real progress be checked.

The show of sheep was large, and fully sustains the high character which Vermont has borne for fine animals and superior wool. Messrs. Jewett, Morse & Co., of Middlebury and Shelburn, and Messrs. A. L. and M. Bingham of Cornwall, were the principal exhibitors of French Merinos. These gentlemen are deserving of great credit for their efforts to introduce these excellent sheep, and we learn that extensive sales were made at remunerating prices. Silesian sheep were shown by Mr. Campbell of Westminster—certainly a valuable stock, bearing fine wool and in large quantity. Spanish sheep were shown by Mr. Hammond of Middlebury, Mr. Pettibone of Manchester, and others.

There were improved cattle, poultry, and swine, on exhibition, but we did not learn the names of their owners, nor can we speak particularly of their merits.

The address of Hon. Wm. H. Seward, of New-York, is worthy of special notice, as the prominent ideas embodied in it, are such as commend themselves to the attention of every intelligent farmer.

After alludlng to the early history of Vermont, its natural advantages and the proofs of her industry and prosperity around him, he said, to improve agriculture is wise; for as is the culture of the fields and flocks in any community, so is always the culture of the men and women by whom it is bestowed. He considered it essential that the business of the farmer should be made more lucrative. It was equally necessary in farming as in other pursuits, to substitute mechanical power for human labor. A constant and uniform relation must always be maintained between the state of agriculture, and indeed of society, and the cotemporaneous state of invention in the arts. He alluded to the comparative condition of American industry as exhibited at the World's Fair, and argued the necessity of increased attention to manufacturing interests. If farmers would distinguish the generation to which they belong, they must have a wiser and more enlightened system of agriculture. This prevailing indifference to agricultural science cannot be suffered to continue. Other nations are busy in improving their systems of agriculture, and will continue to improve, and and we must not neglect to follow, or still better, take the lead. There is no lack of schools or professors adapted and qualified for advancing agriculture. The greatest want is that of pupils. No one wishes to study agriculture—the farmers' sons are adverse to it generally. They do not intend to pursue the calling—the prejudice against farming is hereditary. The farmer himself is not content with his occupation, nor his wife any more so. They regard it as an humble, laborious, toilsome one; they fret about its privations and hardships and thus unconsciously create a disgust for it in their children's minds.

"The prejudice, however, must be expelled from the farmer's fireside; and the farmer and his wife must do this themselves. It is as true in this case as in the more practical one which the rustic poet had in view:—

> "The wife too, must husband, as well as the man,
> Or farewell thy husbandry, do what thou can."

Let them remember that in well constituted and highly advanced society like ours, intellectual cultivation relieves men from labor, but it does not at all exempt them from the practice of industry; on the contrary, it obliges the universal exercise of industry; and that notwithstanding the current use of the figures of speech, "wearied limbs, sweating brows, hardened sinews, and rough and blackened hands," there is no avocation in our country that rewards so liberally with health, wealth and honor, a given application of well-directed industry, as does that of the farmer. If he is surpassed by persons in other pursuits, it is not because their avocations are preferable to his own, but because, while he has neglected education and training, they took care to secure both.

When these convictions shall have entered the farm house, its respectability and dignity will be confessed. Its occupants will regard their dwellings and grounds not as scenes of irksome and humiliating labor, but as their own permanent home, and the homestead of their children and their posterity. Affections unknown before, and new-born emulation will suggest motives to improvement, embellishment, refinement, with the introduction of useful and elegant studies and arts, which will render the paternal roof, as it ought to be,—attractive to the young, and the farmer's life harmonious with their tastes, and satisfactory to their ambition. Then the farmer's sons will desire and demand education as liberal as that now chiefly conferred on candidates for professional life, and will subject themselves to discipline, in acquiring the art of agriculture, as rigorous as that endured by those who apprentice themselves to other vocations."

The speaker alluded to the political power in the hands of farmers, and the importance of intelligence, wisdom and virtue to secure its right use. The expansion of our country will, year by year, call for increased attention to the conservative interest.

The address was listened to with marked attention, and cannot fail to do good. We trust many returned to their homes impressed with a higher sense of the dignity of their position, and higher aims for the future.

The Onion Fly—*Anthomyia ceparum.*

Eds. Cultivator—A short time since, in travelling through the county of Essex, particularly along the beautiful plains in the vicinity of the Au Sable river, I had my attention repeatedly attracted to the sickly and withered appearance of nearly all the fields of onions, through which I passed; upon inquiring the cause, I was invariably told that it was the effects of a worm, and that it was extremely doubtful if a single tuber, in a healthful state, would be obtained from a thousand plants. On raising the bulb from the earth, I had little difficulty in recognizing the larva of a Dipterous insect, and one of a species which, in England, and many other parts of Europe, for the last few years, have almost entirely destroyed the onion crops, upon which so considerable an amount of labor and experience, have been expended in their cultivation. To such a degree have their ravages extended, that the husbandmen in those countries, have been driven to the necessity of giving up the culture of this important vegetable in despair, not having yet met with any efficient remedy for their destruction.

Much uncertainty still seems to prevail among entomologists, respecting the peculiar habits of this little depredator, and we much fear that they will long continue to remain in ignorance, unless some intelligent and interested individual, residing on the spot, and has daily access to the plants, establishes a series of practical observations on their habits, and so traces them through their various stages of existence to the perfect fly. Until this is accomplished, and not till then, will we, with any degree of certainty, be able to suggest any reasonable method for effectually removing them. If it be not done speedily, we greatly fear,—from a knowledge of the prolific manner of their increase,—that they will, in the course of but a few years spread all over the land, and almost, if not entirely, obliterate this highly useful vegetable from our gardens.

This insect depredator, will, I think, undoubtedly prove to be the *Anthomyia ceparum* of Meigen, or a species so closely allied, as to differ but little from it, in any of its habits. It belongs to the second general division of the *Muscides*, that of the *Anthomyzides*, which are composed of species all of which have greatly the appearance of common flies.

The *larræ* is about one-third of an inch in length, fleshy, and of a white color. It is of a conical form, with a smooth and shining surface, and entirely free from any external, superficial appendages. The incisions are finely granulate, and the last and largest segment is obliquely truncated at its base, upon which is placed a surrounding border of eight small knobs, or projecting points. The insect deposits its eggs at the base of the plant, near the surface of the ground, which, in a few

days, become hatched; the larvæ immediately penetrating between the leaves to the bulb, upon which it preys unseen; but the effects soon become visible, for the leaves turn yellow, fall prostrate on the ground, and quickly wither away. In the course of about two weeks they arrive to maturity, and change to the pupa state, and in from fifteen to twenty days more come out the perfect fly, fully prepared to accomplish their depredations, by depositing their eggs upon the more healthy plants. As many as from one to five of the larvæ are frequently to be met with on a single plant.

The perfect insect is about half the size of the common house fly, with a few thinly scattered hairs covering the surface of the body. It is of an ash grey color, the males being distinguished by a series of dark stripes upon the back. The head is marked with a brownish spot upon its apex. The wings are exceedingly transparent, exhibiting beautiful iridescent reflections from their surfaces, and the shoulders of which are of an ochery-brown color, and the veins of a brownish yellow.

This fly may not unfrequently be met with in the spring of the year, basking in the sunshine about the windows of the neighboring dwellings. And from the circumstance of finding the larvæ in the greatest profusion, committing their depredations in the middle and latter parts of August, we are inclined to believe that they pass through several generations in a season, and that it probably makes use of the seeds of the plant on which to deposit the egg for the larvæ of the ensuing spring; if this be so, by steeping the seeds in brine, before sowing, we should suppose would be the proper remedy; if otherwise, the process will not materially effect their germination. They appear to show a distinct predilection for the white onion, in preference to that of any other color.

This insect is exceedingly difficult to destroy. Strewing the earth with ashes has proved of little avail; powdered charcoal answers a much better purpose, and is the one most generally in use, but it should only be thrown over about two-thirds of the bed, so as to leave a portion of the plants for them to resort to on being brought to the perfect state, and driven from their original resting place. When they have been converted to the larva state and commenced their depredations, these plants should be pulled up and consumed with fire.

It has been recommended to prepare the beds as early in the spring as convenient, and suffer them to remain eight or ten days, for the noxious plants to vegetate, then to cover them with straw to the depth of ten inches, and burn them over; after which plant the seeds immediately. This process, it is stated, has proved perfectly successful in driving away the insects and procuring good crops, and in addition, has furnished a capital top dressing to the soil. Onion beds prepared from the hearths upon which charcoal has been burned, have likewise been mentioned as producing the perfect vegetable entirely free from the attack of worms.

Should this charcoal method here mentioned, be universally adopted, we have little doubt but that this insect will in a short time become greatly reduced in numbers, and afford a much better chance for a more healthful crop of the onion plants hereafter. J. Eights. *Albany, Sept.* 1, 1852.

Thorn Hedges.

Eds. Cultivator—As our wood-lands are getting short of wood for fences, it is time for us to be looking out for something more durable. I have thought about thorn hedges, and I may give your readers some information on the rearing and planting of these hedges.

The seed is gathered from the thorn in autumn, and mixed up with dry earth; through the winter, (this is the manner in Scotland,) and in the spring, they sow them broadcast in beds; the first year part of them come up and grow through the summer, when they are transplanted in the spring in the nursery; and for two succeeding years they still come in the beds. They then let them grow two or three years before they plant out into hedges, when the nurseryman puts them into bunches of one hundred each, and cuts the small tops and roots off, and they are ready for planting. There are various ways, sometimes on level ground, but the common way is in ditches. We will take that way. Say the fence is to be made along side of a road—the men employed to be provided with a spade, a shovel, and pick or mattock—the latter being necessary when the ground is hard and stony. The first thing to be done is to set up two sticks, one at each end of the ditch; then set in two or three more in a straight line, and stretch the line along the stakes; then with the shovel, (the shovel is such as those they call the Irish shovels, only a little larger, and the handle no longer than a spade handle,) the line being stretched along the stakes, he turns his face to the road, and cuts along the line with his shovel, sloping back considerably; then turns back and cuts the other way, at about a foot from the other line; next he cuts across the sod and turns it over, but keeps it back about four inches from the lip of the ditch, so that it forms an offset called the water table. They then shovel some of the best soil from where they took out the sod, and level it all off ready for the thorns. Then take a bunch of thorns and lay them on a level, with the roots into the ditch, with their tops scarcely out of the edge of the sod, so that they will not be hanging by the roots when the frost moulders away the earth. They are laid about three inches apart. This done, they shovel out of the bottom of the ditch on top of the thorns, until the ditch be two feet, and sometimes more, deep. They then clap all along the face of the ditch, to make it solid and compact. It is then finished with exception of the fence. The fence is made by driving stakes on the top of the ditch, four to the rod, and nailing on two boards, three or four inches broad.

I have been a long time in this country, and have had an opportunity of trying experiments, and I find that thorns from the old country do not thrive well here. Whether it is owing to the climate, or the snow lying so deep on them in the winter, I do not know.

I am now about to make some inquiry among your many readers, as to how the thorn in this country would do. I have read your Cultivator several years, and I do not remember to have seen anything with respect to that, except the Osage Orange hedges, and that yet remains to be proved. Will you please inform, through the columns of the Cultivator, whether any one has made the experiment, and how they have succeeded, and how they were planted? Robert Shiell. *Hammond, St. Lawrence Co., N. Y., May* 5, 1852.

State Agricultural Society Fair.

Award of Premiums, Utica, 1852.

CATTLE.

SHORT-HORNS—*Bulls, three years old.*

1. S. P. Chapman, Clockville, Madison county, Halton,..... $30
2. Wm. H. Bullock, Bethelem, Copson,..... ..... Trans. and 20
3. Wm. H. Brown, Peterboro', Madison county, Comet,..... 10

Two years old.

1. J. M. Sherwood, Auburn, N. Y., Vane Tempest,..... 20
2. William Osborne, Waterville, Oneida county, Grand Duke,. 15
3. William Rathbon, Springfield, Otsego county..... 10

One year old.

1. J. M. Sherwood, Auburn, N. Y., Gen. Putnam,..... 15
2. M. D. Bailey, Wampsville, Madison county, Grand Duke,... 10

Bull calf.

1. J. M. Sherwood, Auburn, N. Y., La Fayette,..... 8
2. Wm. Osborne, Jr., Waterville, Oneida county, Duke Charles,..... ..... Trans. and 3

Commended.

Wm. M. Bullock, bull calf, Comet,..... Trans.

SHORT-HORNS—*Cows, three years old.*

1. J. M. Sherwood, Auburn, Red Rose,..... 30
2. S. P. Chapman, Clockville, Duchess,..... 20
3. J. M. Sherwood, Auburn, Pansy,..... 10

Two years old.

1. S. P. Chapman, Clockville, Ruby 2d,.. 20
2. J. M. Sherwood, Auburn, Nymph 2d,..... 15
3. J. M. Sherwood, Auburn, P. A. 2d,..... 10

One year old.

1. S P. Chapman, Clockville, Hilpa 4th,..... 15
2. N. J. Becar, Smithtown, L. I..... ... 10

Heifer calf.

1. J. M. Sherwood, Auburn,..... 8
2. S. P. Chapman, Clockville, Ruby 3d,..... Trans. and 3

Commended.

J. M. Sherwood, Auburn, 3 year old cow, Amina, vol. Trans.
J. M. Sherwood, Auburn, 2 year old heifer, Pansy 5th, Trans.
N. J. Becar, Smithtown, L. I.. heifer calf, Transactions.
S. Merriman, Oriskany, short-horn heifer, 2 years old, Trans.

DEVONS—*Bulls three years old.*

1. L. H. Colby, Scipio, Cayuga, Champion,..... 30
2. John Oliver, Sterling, Cayuga,..... 20
3. S. H. Church, Vernon Centre, Diamond,..... 10

Two years old.

1. J. H. Caswell, West Exeter, Osceola,..... 20
2. Marcus Zeah, Fulton, Schoharie county,..... 15
3. John Muir, Sen., Madison county..... .. 10

One year old.

1. W. P. and C. S. Wainright, Rhinebeck, May Boy,..... 15
2. J. B. Tuckerman, Richfield, Young Major,..... 10
3. Joseph H. Eastman, Oneida county,..... 5

Bull calf.

1. W. P. and C. S. Wainright, Rhinebeck, Keokuk,..... 8
2. S. H. Colby, Scipio, Cayuga county, Valiant,.... Trans. and 3

Cows, three years old.

1. John Freemyre, Fulton, Schoharie county,..... 30
2. W. P. and C. S. Wainright, Rhinebeck,... 20
3. John R. Chapman, Oneida Lake, ... 10

Two years old.

1. Wm. C. Remington, Sennett, Cayuga co.,... 20
2. W. P. and C. S. Wainright, Rhinebeck,..... 15
3. L. H. Colby, Scipio, Cayuga co..... 10

One year old.

1. R. H. Van Rensselaer, Morris, Otsego co., ... 15
2. W. P. and C. S. Wainright, Rhinebeck,..... . 10
3. W. P. and C. S. Wainright, Rhinebeck,..... 5

Heifer calf.

1. R. H. Van Rensselaer, Morris, Otsego county,..... 8
2. J. M. Collins, Smyrna, Chenango co., Trans. and. 3

Commended.

Miles Vernon, Stafford, 1 cow,..... ..... Trans.
Samuel Baker, Edmeston, heifer, 2 years old,..... Trans.
R. H. Van Rensselaer, Morris, 1 heifer,..... Trans.
John Freemyre, Fulton, 1 calf,..... ..... Trans.

HEREFORDS—*Bulls, three years old.*

2. Gen. Roswell Harmon, Wheatland,..... 20

Two years old.

1. Erastus Corning, Jr., Albany, Cardinal Wiseman,..... 20

One year old.

1. Wm. H. Sotham, Livingston co., Climax,..... 15
2. L. F. Allen, Buffalo, Talma,..... 10

Bull Calf.

1. Erastus Corning, Jr., Albany,..... 8
2. L. F. Allen, Buffalo,..... Trans. and 3

Cows, three years old.

1. Wm. H. Sotham, Livingston co., Pretty Maid,..... 30
2. E. Corning, Albany, Victoria 2d,..... 20
3. Wm. H. Sotham, Livingston co., Rosy,..... 10

Two years old.

1. Wm. H. Sotham, Livingston co., Twin,..... 20
2. E. Corning, Jr., Albany, Victoria 3d,..... 15
3. Wm. H. Sotham, Livingston co., Bloomy,..... 10

One year old.

1. Wm. H. Sotham, Livingston co., Myrtle,..... . 15
3. Wm. H. Sotham, Livingston co., Dairy Maid,... 5

Heifer Calves.

1. E. Corning, Jr., Albany, Perfection... 8

Commended.

George Clark, Otsego co., herd of 50 head of cattle, different ages,..... Silver Medal.

AYRSHIRE BULLS—*Three years old.*

EXTRA STOCK.—A bull, "Dandy," exhibited by J. C. Tiffany, Coxsackie, Greene county, with no competitor in his class, and having received the first prize at Albany in 1850, the committee awarded a *Certificate.*

Three years old.

1. E. P. Prentice, Mt. Hope, Albany co., Dundee 2d,..... $20

One year old.

1. James Brodie, Jefferson county, Kilburn,..... 15
2. E. P. Prentice, Mt. Hope, Dundee 3d,..... 10
3. Anthony Van Bergen, Coxsackie, Greene county,..... 5

Bull Calf.

1. E. P. Prentice, Mt. Hope, Dundee 4th,..... 8
2. J. C. Tiffany, Coxsackie, Repeal,..... Trans. and 3

Cows, three years old.

1. James Brodie, Adams, Jefferson co., Mary Gray,..... 30
2. E. P. Prentice, Mt. Hope, Albany co., Jennie,..... 20
3. E. P. Prentice, Mt. Hope, Albany co., Red Lady,..... 10

Two years old.

1. J. C. Tiffany, Coxsackie, Red Lady,..... 20

One year old.

1. E. P. Prentice, Mt. Hope, Katy 3d,..... 15
2. J. C. Tiffany, Coxsackie, Greene co., Belle,..... 10

Heifer Calves.

1. E. P. Prentice, Mt. Hope, Albany co., Red Lady 3d,..... 8
2. E. P. Prentice, Mt. Hope, Albany co., Dolly 3d,.. Trans. and 3

GRADE—*Cows, three years old.*

1. John Brown, Auburn, Durham cross, Blossom,..... 30
2. Geo. Clark, Springfield, Durham and Hereford,..... 20
3. Geo. Clark, Springfield, same as above,..... 10

Two years old.

1. J. C. Pool, Clinton, Oneida co., Devon and Native,..... 20
2. Wm. R. Miller, Oneida co., Durham and Native,..... 15
3. Gains Butler, Clinton, Oneida co , Devon and Native,..... 10

One year old.

1. Craig Wadsworth, Geneseo, Livingston co ,..... 15
2. Elon Sheldon, Sennett, Durham and Native,..... 10
3. S. H. Church, Vernon, Devon and Native,..... 5

Heifer Calf.

1. Joseph H. Eastman, Marshall, Devon and Native,..... 8
2. Chas. Mason, Vernon, Devon and Native,..... Trans. and

Commended.

John Brown, Auburn, Durham cross,. ..... Trans.

Natives—Cows.

1. Elisha Williams, New Hartford,..... 30
2. Joseph H. Eastman, Marshall,..... 20
3. Charles Downer, New Hartford, Oneida co.,..... 10

Two years old.

1. Richard M. Hunt, Kirkland,..... 20
2. E. H. Morgan, Marcy. Oneida co.,..... . 15

Heifers.

1. Seth Miller, New Hartford,..... 8

WORKING OXEN.

1. Best 20 yoke (county)—None awarded.
2. " S. M. Mason and others, New Hartford,..... 40
1. " 10 yoke (town) J. S. Wadsworth, Geneseo,..... 30
2. " E. Sheldon, Sennett, Cayuga co.,..... 20
1. " single yoke, N. B. Wakeman, Covert, Seneca,..... 20
2. " Geo. Clark, Springfield, Otsego,..... 15
3. " A. Ross, Preston, Chenango,..... 8

Commended.

Horatio N. Carey, Marcy, 1 yoke spayed working heifers, ...

THREE YEARS OLD STEERS.

1. Best 10 yoke (county) F. D. Blackstone & Co., N. Hartford,.. 2
1. " single yoke, Hiram P. Potter, East Hamilton,..... 1
2. " E. Sheldon, Sennett, Cayuga,..... ... 1
3. " Luther Comstock, Kirkland, Oneida,.....

Highly Commended.

Simon Antisdell, Middlefield, Otsego county,..... Trans.
Horatio N. Carey, Marcy, Oneida county,..... Trans.
Luther Comstock, Kirkland, Oneida county,..... Trans.
George Sheldon, Conquest, Cayuga county,..... Trans.

TWO YEARS OLD STEERS.

1. Best 10 yoke (county)—None awarded.
2. " James H. Sherill, New Hartford,.... 1
1. " Single yoke, G. Sheldon, Cayuga county,..... 1
2. " Chas. Mason, Vernon, Oneida county,.....
3. " John W. Williams, Whitesboro'..... Trans. and
1. " Boy's Training, Henry Comstock, entered by L. Comstock,..... ... Silver Medal.

Commended.

M. Owen, West Winfield, 1 pair Dur. calves, small Silver Medal.

ONE YEAR OLD STEERS.

1. Best single yoke, Daniel M. Brown, Brookfield,..... 8
2. " Sam. H. Hammond, Brookfield, Madison co ,..... 6
3. " Wm. Robson, Westmoreland,..... Trans. and
1. " Boy's training, John Robson, (under 16,) Westmoreland, Oneida co.,..... Silver Medal.

Commended.

George Clark, Springfield, Otsego county,..... .... Trans.

MILCH COWS.—*Commended.*

1. Seth Miller, New Hartford, Oneida co.,..... Trans.
2. Elias Thomas, Checkerville,..... Trans.

FAT CATTLE.—*Four years old.*

1. Craig Wadsworth, Geneseo,. 25
2. Chas. Wadsworth, Geneseo,..... 15

Single Ox.

1. Hiram P. Potter, East Hamilton, 4 years old,..... 12

Cow—Four years old.

1. E. Sheldon, Sennett, Cayuga co..... 12
2. A. Ross, Preston, Chenango co.,..... 8

Heifers.

1. John W Taylor, Lima, Livingston co., ... 10
2. H. H. Kellogg, Clinton, Oneida co., ... 5
3. H. N. Carey, Marcy, Oneida co., ... Trans.

Commended.

J. W. Taylor, Lima, 40 head 3 years old steers, ... Trans.

HORSES.

ALL WORK—*Stallions, 4 years old.*

1. Daniel North, Middlefield, "Gifford Morgan," $30
2. Truman D. Derick, Troy, "Young Norman," 20
3. Mark Gill, Pittsfield, Otsego co., "Highlander," 10
4. J. D. Remington, Sennett, "Young Black Hawk," Youatt.

Mares and Foals.

1. Samuel Baker, Edmeston, Otsego county, ... 30
2. Horatio Curtis, Clinton, Oneida county, ... 20
3. R. S. Stacey, Pompey, Onondaga county, ... 10
4. Elias Thomas, Volney, Oswego county, ... Youatt.

Commended.

S. A. Gilbert, East Hamilton, "Young Gifford Morgan," Trans.
John Roosevelt, Northampton, "Black Hawk," ..... Trans.
Eli Rudd, Ellisburgh, "Young Mountain Morgan," .... Trans.
Truman Cone, Denmark, "Black Blucher," ..... Trans.
Ira Brayton, Fort Ann, "American Eagle," ..... Trans.
John K. Tucker, Buffalo, "Young Defiance," ..... Trans.

Draught Stallions.

1. Cornelius Scobie, Springport, "Interest," 30
2. Charles Peek, Van Buren, "American Messenger," thorough bred, ... 20

Commended.

The thorough bred horse "Consternation," owned by J. B. Burnet, Syracuse, having heretofore received the first premium, is awarded a certificate by the judges.

Three years old Stallions.

1. Orin H. Pownell, Ridgway, Orleans county, ... 25
2. John F. Hager, Verona, Oneida county, ... 12
3. Ira Carrier, Fulton, Oswego county, ... 5
4. Horace Wood, Deerfield, Oneida county, ... Youatt.

Mares.

1. Obadiah Howland, Owasco, Cayuga county, ... 25
2. J. M. Gillett, Clyde, Wayne county 12
3. F. A. Spencer, Westmoreland, Oneida county, ... 5
4. R. A. Avery, Vernon, Oneida county, ... Youatt.

STALLIONS—*Two years old.*

1. M. D. Burnet, Syracuse, Tiptoe, ... 15
2. Barnes Davis, Vernon, Oneida county, ... 10
3. R. M. Remington, Sennett, Young General Gifford, Youatt.

Mares.

1. M. Leyden, jr., De Witt, Onondaga county, ... 15
2. Obadiah Howland, Owasco, Cayuga County, ... 10
3. S. A. Gilbert, East Hamilton, ... Youatt.

Commended.

1. Volkert Vrooman, Mohawk, Waxy Pope, ... Trans.
2. David W. Shaw, Gains, Orleans, Empire, ... Trans.
3. Mrs. Matilda Hibbard, Syracuse, Hornblower, ... Trans.
4. L. Tower, Oswego, Morgan Messenger, ... Trans.

STALLIONS—*One year old.*

1 Charles W. Ingersoll, Lodi, ... 10
2 Wm. R. Kirby, Bainbridge, ... 5
3. Calvin Shattuck, Marcy, ... Youatt

MATCHED HORSES—*Carriage.*

1. Benjamin Ashby, Auburn, ... 20
2. Olney Gould, Albion, Orleans, ... 15
3. H. Gould, Albion, Orleans, ... 8

Special, to H. B. Moore, Rochester, pair gray horses, ... 20

Commended.

1. D. S. Forbes, Chautauque county, ... Youatt.
2. P. D. Livingston, Auburn, ... Trans.
3. E. M. Parsons, Rochester, ... Trans.
4. Josiah Barber, Auburn, ... Trans.
5. S. White, jr. New-Haven, Oswego county, ... Trans.
6. Edward Dewey, Deerfield, Oneida county, ... Trans.

Draught.

1. John Bryden, Kirkland, Oneida county, ... 20
2. J. A. Holmes, Hastings, ... 15
3. Royer & Avery, Paris, Oneida co., ... 8
4. Nathaniel S. Wright, Vernon, Oneida county, ... Youatt

Ten pair Farm Horses.

1. Squire M. Mason and others, New-Hartford, ... 25

Geldings

1. M. G. Varney, Prospect, Oneida county, ... Dip. and 10
2. L. R. Proctor, Hartwick, Otsego county, ... 8
3. Wm. H. Hills, Rome, ... 6
4. Jonathan Bliss, Floyd, ... Youatt.

Commended.

Clark & Jerolman, Whitestown, Sorrel horse, ... 10

Single Mares.

1. W. V. Willoughby, Newport, ... Dip. and 10
2. H. B. Moore, Brighton, Monroe, ... 8
3. Daniel W. Curtiss, Canaan, ... 6
4. J. Tanner, Schuyler, ... Youatt.

Commended.

1. M. L. Hungerford, Watertown, Jefferson county, ... Trans.
2. Horace Shepherd, New-Hartford, ... Trans.

Foreign Horses.

Blood Stallion, E. Adams, Vergennes, Vt., Black Hawk, jr., Dip. 10

All Work.

Best Stallion, Silas Hale, South Royalton, Mass., Green Mountain Morgan, ... Dip and 10

Best Draught Stallion, John C. Willson, Guelph, C. W., John Long, ... Dip. and 10

Commended.

Newell Miner, Simsbury, Conn., Morgan, ... Trans.
F. A. Wier, Walpole, N. H., Gifford Morgan, ... Trans.

JACKS AND MULES.

Jacks—P. Ward, Owego, ... 30
Mules—H. H. Kellogg, Clinton, ... 20

SHEEP.

FAT SHEEP—LONG WOOLED—*Over two years.*

1. Hungerford & Brodie, Adams, Jefferson county, ... 6
2. Elias L. Barlow, Lagrange, ... 4

Under two years.

1. John McDonald, Warren, Herkimer county, ... 6
2. John McDonald, Warren, Herkimer county, ... 4

MIDDLE WOOLED—*Over two years.*

1. John McDonald, Warren, Herkimer county, ... 6
2. do do do 4

CROSS BREED—*Over two years.*

1. Richard Gypson, Westmoreland, Oneida county, ... 6

LONG WOOLED BUCK—*Two years upward.*

1. Hungerford & Brodie, Adams, Jefferson county, ... 12
2. James A. Jackson, Gilbertsville, Otsego county, ... 10
3. Elias L. Barlow, La Grange, Dutchess county, ... 6

Buck—under two years old.

1. John A. Rathbun, Springfield, Otsego county, ... 12
2. John McDonald, Warren, Herkimer county, ... 10
3. Amos T. Wood, Ellisburgh, Jefferson county, ... 6

Five Ewes—Over two years old.

1. Hungerford & Brodie, Adams, Jefferson county, ... 12
2. Charles W. Eells, Kirkland, Oneida county, ... 10
3. Elias L. Barlow, La Grange, Dutchess county, ... 6

Ewes—Under two years old.

1. Hungerford & Brodie, Adams, Jefferson county, ... 12
2. John McDonald, Warren, Herkimer county, ... 10
3. John A. Rathbun, Springfield, Otsego county, ... 6

Buck Lambs.

1. Elias L. Barlow, La Grange, Dutchess county, ... 8
2. Jacob C. Rathbun, Springfield, Otsego co., Morrell's Shep'd & 4

Commended.

1. J. A. Jackson, Gilbertsville, Buck lambs, ... Trans
2. John McDonald, Warren, Herkimer county, ... Trans.
3. Elias L. Barlow, La Grange, yearling ewes, ... Trans.

Middle Wooled Bucks—over two years old.

1. Z. B. Wakeman, Herkimer, ... 12
2. do do 10
3. do do 6

Bucks under two years old.

1. Z. B. Wakeman, Herkimer, ... 12
2. do do 10

Five Ewes over two years old.

1. J. M. Sherwood, Auburn, 12, ... 12
2. Z. B. Wakeman, Herkimer, ... 10
3. C. W. Eells, Westmoreland 6

Five Ewes under two years old.

1. Z. B. Wakeman, Herkimer, ... 12
2. Wm. Robson, Westmoreland, ... 10
3. Geo. K. Eells, Kirkland, ... 6

Three Buck Lambs.

1. Z. B. Wakeman, Herkimer, ... 8
2. J. M. Sherwood, Auburn, ... Morrell's Shepherd and 4

Three Ewe Lambs.

1. Z. B. Wakeman, Herkimer, ... 8
2. J. M. Sherwood, Auburn, ... Morrell's Shepherd and 4

Merinos—Bucks over two years old.

1. J. D. Patterson, Westfield, Chautauque county, ... 12
2. Sharp & Taylor, Lockport, ... 10
3. Reed Burrit, Burdet, Tompkins county, ... 6

Under two years old.

1. Sharp & Taylor, Lockport, ... 12
2. Arza Gage, De Ruyter, Madison county, ... 10
3. Joseph Haswell, Hoosick, Rens. co., ... 6

Five Ewes over two years old.

1. J. D. Patterson, Westfield, Chautauque county, ... 12
2. Sharp & Taylor, Lockport 10
3. R. E. Keese, Keeseville, Clinton county, ... 6

Fives Ewes under two years old.

1 J. W. Haswell, Hoosick, Rens., county, ... 12
2. R. E. Keese, Keeseville, ... 10

Three Buck Lambs.

1. Joseph Haswell, Hoosick, ... 8
2. R. E. Keese, Keeseville, ... Morrell and 4

Three Ewe Lambs.

1. R. E. Keese, Keeseville, ... 8
2. Arza Gage, De Ruyter, ... Morrell and 4

WOOL.

1. Fleeces, (none awarded.)
2. N. M. Dart, Harpersfield, Delaware county, ... 3

SAXONY—*Bucks, two years old and over.*

1. Silas B. Crocker, Vernon, ... 12
3. S. H. Church, Vernon, ... 10
3. S. B. Crocker, Vernon, ... 6

Bucks under two years old.

1. S. H. Church, Vernon, ... 12
2. S. B. Crocker, Vernon, ... 10
3. S. H. Church, Vernon, ... 6

Five Ewes over two years.

1. S. B. Crocker, Vernon, ... 12
2. S. H. Church, Vernon, ... 10
3. Joseph Haswell, Hoosick, ... 6

Five Ewes under two years.

1. S. H. Church Vernon, ... 12
2. S. B. Crocker, Vernon, ... 10

GRADE SHEEP—*Bucks over two years.*

1. D. S. Curtis, Canaan, ... $12
2. D. W. Curtis, Canaan, ... 10

Bucks under two years.

1. D. W. Curtis, Canaan, ... 12
2. D. S. Curtis, Canaan, ... 10

Five Ewes over two years.

1. Joseph Haswell, Hoosick, ... 12
2. D. S. Curtis, Canaan, ... 10
3. D. W. Curtis, Canaan, ... 6

Five Ewes under two years.

1. D. S. Curtis, Canaan, ... 12
2. D. W. Curtis, Canaan, ... 10

Three Buck Lambs.

1. D. S. Curtis, Canaan, ... 8
2. D. W. Curtis, Canaan, ...Morrell's Shepherd and 4

Three Ewe Lambs.

1. Joseph Haswell, Hoosick, ... 8
2. D. S. Curtis, Canaan, ...Morrell's Shepherd and 4

FOREIGN SHEEP—LONG WOOLED—*Bucks.*

George Miller, Markham, C. W., ... 10

Five Ewes.

Wm. Miller, Pickering, C. W., ... 10

MIDDLE WOOLED—*Buck.*

Ralph Wade, jr., Coburgh, C. W., ... 10

Five Ewes.

Ralph Wade, jr., Coburgh, C. W., ... 10

Three Buck Lambs—Long Wooled.

George Miller, Markham, C. W., ... 5

MERINOS—*French Buck.*

Daniel Kimball, Clarendon, Vt., ... 10

Five French Ewes.

O. F. Holiburd, & D. Kimball, Shelburne, Vt., ... 10

SWINE.

LARGE BREED—*Boar over two years old.*

Isaac W. Curry, South Trenton, ... 10

Boar one year.

Z. B. Wakeman, Herkimer, ... 10

Boar six months.

1. Otis Simmons, Madison, ... 8
2. Morris Hicock, New-Hartford, ... 4

Sows, two years old and over.

1. Isaac W. Curry, South Trenton, ... 10
2. Geo. K. Eells, Clinton, ... 5

Sow one year.

John Jeffers, Kirkland, ... 10

SWINE—SMALL BREED—*Boar, one year old.*

Almond Barnard, Marshall, ... 10

Boar six months.

Henry Dodge, Trenton, ... 8

Sows, Two years old.

1. L. T. Marshall, Vernon, ... 10
2. Z. B. Wakeman, Herkimer, ... 5

Sows one year.

1. A. L. Fish, Litchfield, N. Y., ... 10
2. Elisha Williams, New-Hartford, ... 5

Sow six months.

Henry Dodge, Trenton, ... 8

Lot Pigs.

A. L. Fish, Litchfield, N. Y., ... 10

Commended.

James Plant, Utica, lot of four fine pigs, ... 5

FARM IMPLEMENTS TRIED AT GENEVA, JULY, 1852.

Grain Reapers.

1. T. Burrall, Geneva, Burrall's Reaper, ... Dip. and 50
2. J. H. Manny, Wadham's Grove, Illinois, Manny's convertible reaper for grain or grass, ... 30
3. Seymour & Morgan, Brockport, ... 20

Mowing Machines.

1. J. H. Manny, Wadham's Grove, Ill., ... Dip. and 50
2. Howard & Co., Buff., Ketchum's Mowing Machine, ... 30

Grain Drills.

1. P. Seymour, East Bloomfield, N. Y., ... Dip. and 25
2. Bickford and Huffman, Macedon, N. Y., ... 15
3. S. R. Tracy, Newark, N. Y., ... 10

Horse power on the lever principle.

1. J. A. Pitts, Buffalo, ... Dip. and 25
2. Eddy, Dyer & Co., Union Village, Washington co., N. Y., .. 15

Horse power, endless chain principle.

1. Emery & Co., Albany, ... Dip. and 25
2. E. W. Badger, Fly Creek, N. Y., ... 15

Iron Horse Power.

1. B. H. Wakely, McLean, Tompkins county, ... Dip. and 25
2. Eddy, Dyer & Co., Union Village, N. Y., ... 15
3. J. A. Pitts, Buffalo, ... 10

Thrashing Machines with cleaning apparatus.

1. J. A. Pitts, Buffalo, ... Dip. and 10
2. Hall & Thompson, Rochester, ... 8

Thrashing Machines without cleaning apparatus.

Eddy, Dyer & Co., Union Village, N. Y., ... 10

Seed Planters.

Joshua Woodward, Haverhill, N. H., ... Dip. and 10

Cultivator, general purposes.

1. S. R. Tracy, Newark, Wayne county, ... Dip. and 10
2. Henry Howe, Canandaigua, ... 8

Broadcast Sower.

Pierpont Seymour, East Bloomfield, ... Dip. and 10

Portable Saw Mill.

1. E. W. Badger, Fly Creek, N. Y., ... 10
2. Emery & Co., Albany, ... 8
3. E. W. Badger, Fly Creek, ... 5

Corn Sheller—hand power.

1. Rapalje & Co., Rochester, ... 6
2. Zenas Wright, Utica, ... 4

Vegetable Cutter.

J. Rapalje & Co., Rochester, ... 6

Portable Grist Mill.

1. Edward Harrison, New-Haven, Ct., ... 10
2. Hart & Munson, Utica, ... 5

Farm Scraper.

Zenas Wright, Utica, ... 5

Dog Power Churning Machine.

A. H. Randall, Verona, N. Y., ... 5

Pump.

1. Hinman, Higley, & Co., Utica, ... 5
2. Rapelje & Co., Rochester, ... 3

Horse Hoe.

Pierpoint Seymour, East Bloomfield, ... 20

AGRICULTURAL IMPLEMENTS—*Most numerous and best collection.*

1. Rapelje & Co., Rochester, ... 25
2. Thomas Foster, Utica, ... 15

Agricultural Implements made in the State.

J. Rapalje & Co., Rochester, ... 25

Commended.

Portable Cider Mill, W. R. Lamphaer, Lancaster, Pa., ..Trans.
do do D. F. Phelps, Ashland, co., Ohio, ...Trans.
Flour Packer and improved Mill Spindle, John T. Noye, Buffalo, Dip. and 3

MACHINERY.

Drain Tile and Chimney Top.

J. W. Gregory, Clinton, Oneida county, ... 5

Commended.

Portable Hydraulic Press, P. C. Curtis, Utica, small Sil. Medal.
Iron Curb for Chain Pump, Downs & Co., Sen. Falls, Diploma.
Pumps and Garden Engine, Downs & Co., Sen. Falls, s. S. Medal.
Model of Vertical Hay Press, S. Dederick, Albany, do
Machine for crushing, grinding, and pulverizing, E. & J. Bussing, N. Y., ...Dip.
Steam Engine, D. A. Woodbury & Co., Rochester, Sil. Medal.
Iron Farm Fence, M. P. Coons, Troy, ... 10
Patten's Leather Splitting Machine, A. K. Northrop, Deansville, Dip.

Corn Fodder.

In the course of the last six or eight years, much has been said and written upon sowing corn for fodder. Few farmers have practiced this method of securing feed, but in a dry season like the present, many would do well to avail themselves of it. Every farmer who keeps any great number of cattle, should sow a little for feeding out in "dog-days," as green food for milch cows, or to other stock when necessary.

The plan usually adopted is to sow broadcast, and when of sufficient growth to mow, and cure for winter feed, as we do hay, or to feed green in the yard or field. When sown broadcast I think it should be fed green; for when made into dry fodder, the chances are that the crop will be weather beaten and spoiled before it can be sufficiently cured for storing in the barn. A sudden shower, or long rain, will almost invariably ruin the fodder. Corn stalks require a great deal of curing before they become dry enough to keep as well as hay. Should they be carried into the barn with a little moisture on them, and stowed away compactly, they will be almost sure to heat and spoil. And if kept in the sun long enough to cure perfectly, the leaves become dry and crumble, before the stalk is sufficiently cured. When the crop is intended for winter fodder, a better plan is to prepare the ground properly, and sow the corn in drills with a seed sower, some twenty inches or two feet apart. The weeds may be kept down by passing a horse cultivator two or three times between the rows. In harvesting this crop, the same course may be pursued as in securing the corn crop in the fall—cut up at the bottom with a corn knife, and stack it, by gathering the stalks around a bunch of standing corn till the stook is of good size, then turn down the tops and confine with a band of straw, and the work is done. The stooks may stand till the fodder is well cured, which will take from six weeks to two months, as the case may be, and if the stooks are

well put up, there will be no danger of the fodder being injured by the weather.

When sown broadcast, the corn should be thickly scattered, so as to prevent the weeds from growing. The best time for cutting the corn for green feed, is after the stalk has attained its full growth, or when the ear is beginning to form. However, those who have more experience, may know better about the time of cutting. Let every farmer make a trial of half an acre of corn fodder, and after one experiment they will continue to raise it. L. DURAND. *Derby, Ct., July* 28, 1852.

Advantages of a Change of Seed.

A recent number of the North British Agriculturist contains an article on this subject, from which we gather the following statements. Experience has proved that a change from an inferior to a richer district, is seldom beneficial, but that a change from a warmer to a colder district, is always followed by a beneficial result, in somewhat shortening the period of growth, an increase of weight, appearance of sample, and very generally in the produce, the difference in straw being equally observable. It has also been found that now and improved varieties of grain in a few years generally lose their distinctive characters. This has been imputed to a falling off of the vitality of the new, and consequeutly hybrid plant, showing the necessity of systematically selecting and propagating agricultural seeds of all kinds. A change of seed wheat from one district to another, has frequently resulted in an increase of produce of about two bolls, (twelve bushels,) an acre. On a farm possessing a variety of soil, the change of seeds from one part to the other, has always been beneficial. The introduction of seed wheat from a region where this crop is not affected by the smut, is said to prevent this disease, even better than any preparation of the seed. The more recently the grain has been removed from the straw the better, as it is liable to become musty when lying in store.

The same deterioration in quantity and quality is noticable in seed oats, when the same seed is continued. The following advice of the Editor, will be equally applicable to farmers in this country.

"We hope gentlemen will continue to direct their attention to the subject of change of seed, and that they will favor the public with the results of their experience. As agriculture is emerging from the rule of thumb practice, it will prove highly advantageous for its speedy advancement, that experiments on this, as well as other subjects, be only undertaken with care, and upon correct principles; that not only the land, with produce, be measured, but also every care exercised in noticing the varieties of the grain, the nature of the soil on which it is grown, the climate, as regards elevation, moisture, &c., the period of sowing, coming into ear, and when ready for cutting, with the result of the after produce. Nothing should be regarded as unimportant in conducting agricultural experiments. We would suggest the importance of undertaking experiments, not only with grain, the growth of a different climate, but that that these experiments should embrace the question of steeping the seeds in liquids containing a solution of different substances, such as dissolved nitrate of soda, potash, sulphate of ammonia, &c., and also how far the plan of coating the seed with such a substance as guano, for instance, affects the future produce. We make these suggestions with the greater confidence, as we have experimentally found that the produce was sensibly increased of wheat, oats, and barley, by steeping in such solutions, and that steeping the two latter grains checked, if not wholly prevented, black heads."

Crab Grass.

LUTHER TUCKER, Esq.—The above named grass is superior to all others in the southern U. States, for the production of hay; and not inferior in quality to northern hay.

Not having noticed a description of it in print, I send you a brief one, and trust you will conclude it is not only a valuable, but a remarkable grass—and, in order for a better understanding of its merits, I will give you a description of a southern meadow in Louisiana, on the banks of the Mississippi River.

The ground is plowed usually in January or February, every season, and sowed in oats, and harvested in May or June; (no grass seed is ever sown.)

The Crab grass makes its appearance early in the spring, and by the time the oats are harvested, the grass is a few inches high; and if the season is favorable, it will produce from one to two tons of hay per acre, in September, seed enough having fallen from this to stock the same.

I have harvested a crop of oats, and cut a full crop of grass from the same land, every year, for many years in succession, without any apparent diminution in quantity.

The grass grows from one to three feet in length, inclined to run, resembling English grass, or red top. It has never failed of a crop. It generally dies out in the winter, and comes up from the seed in the spring. It is fine for pastures. S. TILLOTSON. *Canton, Conn., July* 15.

[FOR THE CULTIVATOR.

The Plow.

I sing the plow, the good old plow,
Which since its race began,
True riches to the world has brought—
True dignity to man.

And though its share may show the soil,
From mountain side or plain,
It is a wholesome, honest soil,
The soil that leaves no stain.

Unlike *that* soil which guilt imparts,
When from the narrow way
Which truth and honor have marked out,
Man dares to go astray.

The yielding earth its furrows takes
As seas the vessel's prow,
But not a furrow does it plant,
Or wrinkle on the brow.

Though forged to break the stubborn glebe,
And act the hostile part,
It only asks the harden'd hand,
And not the harden'd heart.

No widow's tears or orphan's wail
Upon the breeze are borne,
But peace and plenty, health, and joy
Its victories adorn.

It fashions not the darksome mine,
The grains of gold to gain,
But hopefully turns up the soil
Which yields the golden grain.

God speed the Plow! for carking care,
Nor penury's chill blight,
Shall follow him who follows thee,
And keeps thy plowshare bright.

C. F. L. F.

Milwaukie, Wisconsin.

Your character cannot be essentially injured, except by your own acts.

Keep your own secrets if you have any.

Horticultural Department.

Pomological Meetings at Utica.

Interesting pomological meetings, consisting of a few of the most intelligent cultivators in attendance at the New-York State Fair, was held on the evenings of the 7th and 8th of 9 mo., (Sept.)

First Evening.

The *Winter Nelis Pear* being called up for discussion, P. Barry, of Rochester, stated that it was of weak and crooked growth, would not grow on the quince; but he admitted it was a pear of high flavor. This opinion was corroborated by Wm. Reid, of Elizabethtown, N. J., who spoke of the scarcity of this tree in nurseries, as proving the difficulty of its culture. C. M. Hovey, of Boston, regarded it a vigorous grower, although slender, and said it was one of the twelve regarded as best at Boston. F. R. Elliott, of Cleveland, considered it as a handsome, fair, and good fruit. W. R. Coppock, of Buffalo, had known the fruit as good as the Seckel, and had found the growth thrifty, though slender. J. Morse, of Cayuga Bridge, stated that after having grown it for many years, he found it never blighted, and he regarded it as only excelled in value by the White and Gray Doyenne. Wm. Reid stated that it dropped its leaves badly, as well as Flemish Beauty and others. T. C. Maxwell, of Geneva, and J. Morse of Cayuga, both stated that Flemish Beauty held its leaves well, in spite of the drouth.

Vicar of Winkfield.—C. M. Hovey, while he regarded the Winter Nelis as best to eat, found the Winkfield best to *sell*—and although not of high quality, was very productive and showy—the tree was beautiful and ornamental—he had known the Winkfield to sell for 75 cents per dozen, and the Glout Morceau for three dollars per dozen. P. Barry would plant the Winkfield in a selection of a dozen sorts, and valued it highly—the Glout Morceau had disappointed some cultivators in Western New-York—it was not the best grower, and did not always mature well. Wm. Reid and others thought it a good grower.

The *third best winter pear* was asked for, and the Vicar of Winkfield was agreed to stand next to Winter Nelis and Glout Morceau.

C. M. Hovey stated that several Flemish pears were apt to have small and worthless fruit among them, among which he named Spoelberg, Wurtemberg, Marie Louise and Passe Colmar—he knew of no American pears liable to this defect. P. Barry cited the Stevens' Genesee, and Dearborn's Seedling, as being similarly defective.

M. Kelly, of Cincinnati, had not found the American pears hardier than the European—in a locality where the tree is strongly liable to injury.

C. M. Hovey found but few American pears tender, and but few that did well on quince stocks—indeed, very few of any origin did well on quince—but he did not know the same proportion of American as of European for this mode of culture.

C. M. Hovey stated that Dearborn's Seedling failed on the quince after a few years—that he should dig up his trees, as they had become an eye sore. T. C. Maxwell had large trees of the Dearborn's Seedling, which did well on quince. Wm. Reid knew trees of the Andrews ten feet high, which grew and did well. These are both American seedlings.

P. Barry thought more experience was needed on this subject—the stocks at first used here were not of good quality—and he thought if the trees were placed in good soil, properly manured, pruned, and not allowed to overbear, that many would succeed well, which would otherwise fail.

The *best early pear* being called for, C. M. Hovey and P. Barry named the Doyenne d'ete—Wm. Reid recommended the Madeleine as earlier—but it was not found so at Boston and Rochester, where the Madeleine was regarded as second best.

The *two best market cherries* being asked for, early and late, most agreed in recommending the Early Purple Guigne and Downer. P. Parry named the Early Purple Guigne and Belle Magnifique. Wm. Reid named the Mayduke as early. The Sweet Montmoreney was regarded by C. M. Hovey as a good late sweet cherry. P. Barry thought it would not sell, when C. M. Hovey stated that he had known it to sell for fifty cents per quart.

Second Evening.

The *superior hardiness of seedling peaches* over budded ones, was proposed as a subject for discussion.

W. Tracy stated that peaches could not be raised at Utica except within the city, the warm and moist valley of the Mohawk preventing a sufficient ripening of the wood; while at Clinton, on higher and more exposed ground, crops were frequently obtained. He stated that two trees within the city, fine seedlings, which were well shaded at the roots from the influence of the sun, bore abundant crops.

C. M. Hovey considered the protection afforded them, as a reason for their successful bearing, without regarding the circumstance of their not being worked. A friend in Kentucky had sent him buds of one of his finest peaches, a fruit which often grew twelve inches in circumference—the buds grew, but the growth was so poor, and they gummed so badly, as to be perfectly worthless. He had generally found seedlings more tender than budded varieties, being often killed at the ends of the branches, while most budded sorts escape even to the very tips.

Dr. Warder of Cincinnati, in explanation of the reason that peach trees were killed the past winter in Kentucky, stated that the thermometer the past winter, in the same region, had fallen to 22° below zero. F. R. Elliott said it had fallen to 19° below at Cleveland, a part of the crop escaping.

J. J. Thomas stated that the thermometer at Macedon, in Western New-York, had sunk during the past winter to 13° below zero, which had not before occurred for many years—that about one-half the peach buds on his grounds had been destroyed, which was a smaller proportion than in other winters when the cold was several degrees less severe. This result he ascribed to the *uniformly* cold weather, without the influence of warm periods in starting the buds, and to the fact that after the severest cold, the sun was obscured by a curtain of clouds. He had observed that buds were often destroyed on the

sunny side of branches, while those which were thawed gradually on the shaded side has escaped.

H. E. Hooker, of Rochester, had known peaches at Montreal, where the thermometer not unfrequently falls to 20° or more below zero, saved by the simple protection of a mat [which could not have increased the warmth of the air, but only prevented radiation, and excluded the sun's rays.] He remarked that budded trees consisted of nothing but *selected seedlings*, and that he had usually found them to endure the cold best.

C. M. Hovey thought budded trees the hardiest, because they usually consisted of such varieties as were of strongest growth.

P. Barry had known native seedlings, standing for many years in grass, loaded with heavy crops, when, had they been cultivated, they might have been barren. This, C. M. Hovey ascribed to the well ripened, and not succulent growth which they acquired. He considered some varieties as hardy and others as tender, entirely independent of the influence of budding.

A list of those sorts which were hardiest, and which bore most uniformly and abundantly after severe winters, being called for, C. M. Hovey named the following:—Yellow Rareripe, Cooledge's Favorite, Bellegarde and Oldmixon Free. Several gentlemen from western New-York named the Early Barnard, or Alberge, of that region, as being eminently hardy and uniformly productive. John Morse, of Cayuga Bridge, had found Jacques' Rareripe to be the hardiest and best peach for market out of some forty sorts, and Early Barnard next. J. J. Thomas named Fay's Early Ann, which he had fruited for eight years, as one of the most uniformly productive of early peaches; in two different years, when the Tillotson and Serrate Early York had nearly failed, this had borne good crops. The present very unproductive season, the White Imperial has also borne fully.

A list of such pears as had grown well on quince stocks, and had borne good crops for several years without exhausting the tree, was next called for, and the following proposed, without objection:—

Louise Bonne of Jersey, Vicar of Winkfield, Glout Morceau, Beurre Diel, Angouleme, White and Gray Doyenne, Napoleon, Beurre d' Amalis, Easter Beurre, Soldat Laboreur, Long Green of Autumn, and Striped Long Green of Autumn, Henry IV, Summer Frankreal, Bergamotte Cadette, Madeleine, Beurre d' Anjou, Urbaniste, and Doyenne Boussock.

The Results of Manure on a Pear Tree.

In a late number of Moore's New-Yorker, Linus Cone, of Oakland co., Michigan, informs us of an interesting experiment with high manuring. Twenty-five years ago he planted a Summer Bonchretien Pear tree, the culture of which, after a few years, was neglected. The fruit at first was fine, specimens often weighing nearly a pound each, but afterwards grew gradually smaller, till nearly worthless. The tree was then well pruned, washed with lye, the ground well spaded, with no improvement. Last spring, twenty bushels of manure from a blacksmith-shop, consisting of dung, parings of hoofs, cinders, &c., was spread and dug in. Twenty bushels of fine, high-flavored fruit, was the result, the same season.

Dwarf Pears for Marketing.

A correspondent inquires if it would be profitable to set out a thousand dwarf pear trees, with a view to marketing purposes. The answer must be—If such sorts are selected as have been found durable on the quince; and if good and enriching cultivation is given them—they would probably prove quite profitable. They should be trained as *half standards*, that is, with *heads* on bare trunks about two feet high. This will prevent the danger of the lower limbs being split off by deep snow, and the only pruning they will require will be a thinning of useless shoots once a year, and preserving a neat ovate shape to the heads

It must not be forgotten that the roots of the quince, being smaller and in a more compact circle than those of the pear, need a better supply of the elements of fertility, if the tree is expected to receive its due amount of nourishment. Hence, constant and enriching cultivation must be given.

Among those sorts which have proved durable upon the quince, are Louise Bonne de Jersey, Stevens' Genesee, Angouleme, Glout Morceau, Passe Colmar, Easter Beurre, Beurre d'Amalis, Diel, Doyenne Boussouck, &c. Many other varieties will grow freely on quince for a few years, but the first good crop of fruit, (even on double worked trees,) exhausts the trees, and they soon languish and die.

There is one great drawback on the profits to be expected from an orchard of dwarfs, or of any other pears; this is the danger of loss from *fire-blight*, which to some cultivators, has resulted in as heavy loss as would have been the destruction of their dwellings by fire. Cultivators of the pear should form themselves into a mutual insurance company, for security against this loss.

The inquiry whether dwarf apple trees can be made to afford profitable crops for market, cannot by any means, be answered so favorably. A tree ten years old will not yield perhaps a tenth part of the crop from an equally well treated standard. We have indeed known a distinguished cultivator to give the opinion, (we shall not say it is strictly correct,) that taking all circumstances into consideration, the average cost of apples from dwarf trees, as now cultivated, is about *five dollars per bushel*. They can be regarded only as curiosities—fancy articles of which they afford sometimes very interesting specimens.

English Strawberries.—A writer in the *Gardeners' Chronicle* gives his views in relation to some new and highly lauded strawberries. The *British Queen*, which has long since established its own reputation as the head of the list, he regards as the best sort in cultivation, being equal to any in size, superior to all large kinds in flavor, productive "*if liberally treated*," and the fruit of which every body must take *two bites*. The *Black Prince* he has rejected; the Goliath, "acid, insipid, coarse, very large, shy bearer;" the *Bicton White*, "only valuable for its color." *Myatt's Eleanor* is pronounced disagreeably acid for the dessert, and only useful on account of its lateness; Myatt's Globe, good and useful but not equal to Eliza and British Queen; Myatt's Mammoth, only for display. "magnificent in appearance, but horrible in flavor." Prince Arthur, "useful—as hard as a cricket ball, and will bear packing well."

New Fruits Tested at Boston.

Every cultivator knows the importance of selecting the best sorts, and this selection is greatly facilitated by knowing the experience of others. With this view, we give a list of those which were more particularly commended by the committee of the Massachusetts Horticultural Society, in their report the past winter, with the remarks of the committee:—

Strawberries—New Pine, and Burr's New Pine, of high flavor and very fine. Early Virginia, Hovey's Seedling, and Jenny's Seedling, the most profitable and best for general cultivation near Boston.

Cherries—Monstreuse de Mezel, resembling Black Tartarian.

Melon—Christiana—"not yet equalled," raised by Capt. Lovett, from a green Malta, impregnated by a very early variety—and for which the Society awarded fifty dollars.

Blackberry—cultivated High Bush—well worthy of cultivation—remarkable for size and beauty.

Raspberries—Knevett's Giant, Franconia, and perhaps Fastolff—worthy of a place in every garden.

The Northern Spy apple has again borne, but "the Committee see no reason to alter the opinion they have before expressed, of the unsuitableness of this variety for general cultivation in this vicinity." Caution against hasty decisions is, however, shown by the fact stated by the committee, "that what is now beginning to be regarded as one of our best winter pears, the Glout Morceau, was but a few years since almost condemned as nearly worthless."

Pomological Congress at Philadelphia.

The fourth Pomolgical Congress, which assembled at Philadelphia on the 13th, and continued in session two days, was in several particulars a most interesting session. Its most important movement was the adoption of a constitution, under the title of the American Pomological Society. Delegates were in attendance from nearly all the Atlantic states, and from several of the Western, and they comprised, evidently, the chief pomological talent and experience of the country. The collections of fruits were very extensive—as a proof we may state, that in a hasty glance among the tables of pears, we observed 200 varieties from M. P. Wilder, 135 from Parsons & Co., 128 from B. V. French, 122 from J. S. Cabot, 140 from Ellwanger & Barry, 100 or more from Wm. Reid, 108 from Thomas Hancock, besides many other collections nearly as large. These included some specimens of much interest, and others of extraordinary beauty and fine growth. On the whole, the Congress was a very satisfactory one, with the exception of too short a time, (only two days,) allowed for its deliberations.

The provisions of the constitution were, biennial meetings—a president, and vice-presidents from each state, territory, or province represented—a treasurer and three secretaries—executive committe of five members—a standing fruit committee of five members in each state or territory, with a general chairman—a standing committee for native fruits, another for foreign fruits, and a third on synonyms, each consisting of seven members, and an admission for membership of two dollars biennially, or twenty dollars for life-membership.

A chairman was appointed for each state, with power to select his associates, consisting of the following gentlemen, with Samuel Walker, of Massachusetts, as chairman of the whole:

Maine—Henry Little, Bangor.
New-Hampshire—Henry F. French, Exeter.
Vermont—C. Goodrich, Burlington.
Massachusetts—E. Wight, Boston.
Rhode Island—Stephen H. Smith, Providence.
Connecticut—George Gabriel, New-Haven.
New-York—P. Barry, Rochester.
New-Jersey—Wm. Reid, Elizabethtown.
Pennsylvania—Thomas P. James, Philadelphia.
Delaware—Dr. Lewis P. Bush, Wilmington.
Maryland—Samuel Feast, Baltimore.
District of Columbia—Joshua Pierce, Washington.
Virgina—Yardley Taylor, Purcell Store, Loudon co.,
South Carolina—William Summer, Pomaria.
Georgia—Stephen Elliott, Jr., Savannah.
Florida—A. G. Sems, Quincy, Gadsden co.
Alabama—Charles A. Peabody, Gerard.
Mississippi—Thomas Affleck, Washington.
Missouri—Thomas Allen, St. Louis.
Ohio—R. Buchannan, Cincinnatti.
Indiana—J. D. G. Nelson, Fort Wayne.
Illinois—Dr. J. A. Kennicott, Northfield.
Kentucky—E. D. Hobbs, Louisville.
Iowa—James Grant, Davenport.
California—Capt. F. W. Macondray, St. Francisco.

The standing committee on Foreign Fruits are, C. M. Hovey, of Mass.; J. P. Kirtland, Ohio; Charles Downing, of New-York; Robert Buist, of Pa.; P. Barry, of New-York; S. L. Goodale, of Maine, and B. Lines, of Ct.

On Native Fruits—Dr. W. D. Brinkle, Pa.; F. R. Elliott, Ohio; E. Tatnell, Jr., Del.; Thomas Hancock, N. J.; Benjamin Hodge, N. Y., and H. P. Byram, of Kentucky.

On Synonyms—J. S. Cabot, Mass.; J. J. Thomas, N. Y.; A. H. Ernst, Ohio; J. A. Kennicott, Ill.; S. D. Pardee, Ct.; A. Saul, N. Y., and J. D. Fulton, Pa.

The discussions in relation to extending or altering the list of recommended fruits, were attended with much interest, and drew out much valuable information. We can, at present, present only a very brief abstract.

S. Walker, of Boston, proposed to strike *Dearborn's Seedling* from the former lists, asserting that it was too small for market,—very small unless on vigorous stocks,—and a poor grower. S. B. Parsons had found it the best pear of its season on Long Island. J. H. Hays regarded it one of the most profitable of pears—that if stricken from the list, it would not be stricken from market—thought it variable with locality, but very valuable B. V. French, of Mass., thought it an inferior pear—the trees he could not make grow. G. B. Deacon, of New Jersey, thought it a very good pear, worthy of cultivation. S. Walker admitted the excellent quality of the fruit, but on account of its small size, and the poor growth of the tree, regarded it as of little value on the whole. S. B. Parsons said the same reason would condemn the Seckel. A. H. Ernst stated that the Seckel grew well at Cincinnati, but from its small size would not sell; it rotted on his hands, while large and poor pears commanded a good price. P. Barry of Rochester, considered the Dearborn's Seedling as one of the most

valuable in western New-York. C. M. Hovey said it was regarded as the best summer pear when adopted, and has continued to sustain its character when well cultivated and thinned. F. L. Olmsted stated that Rivers had found it to grow well on pear and fail on quince. This was corroborated by S. B. Parsons—who asked S. Walker if his trees were not on quince stocks,—who stated that they grew nearly as badly as they could on quince, and would generally die out in about two years. The motion to strike off this pear was withdrawn.

The *Washington pear* was added to the list, for general cultivation, without any objection.

The *Duchesse d'Orleans* was next proposed, and among many remarks, M. P. Wilder stated he had found it a poor grower on quince, and good on the pear—had not, with Robert Manning, found it a great bearer, but could bear witness to its fine appearance and quality. It was concluded to let it remain on the list for trial.

The *Doyenne d' Ete* being called up, A. H. Ernst stated that he had fruited it seven years, and pronounced it handsome and valuable. Hovey, Barry, Wilder, and others, corroborated this opinion, some of whom thought it grew best on pear stocks. S. Walker thought well of this pear, but did not find it to come up to the high character represented. C. M. Hovey called on him to name a better, when he named the Madeleine, which he regarded as superior. P. Barry found it to ripen before the Madeleine, and regarded it as decidedly the best—found it a "splendid grower" on quince. When allowed to ripen on the tree, it was worth little, being dry and mealy, but was fine and juicy if house ripened. B. F. Nourse found it fine in Maine, and a good grower.

The Beurre d' Anjou was proposed, and M. P. Wilder thought there would be a unanimous expression in its favor—and stated that it was the best new pear he had fruited in ten years, and that it had kept till January and February. T. Hancock had found it a most valuable pear,—the crop evenly distributed through the tree. S. Walker found it to bear well and evenly—the fruit of fair size fine shape, and very delicious—and would undoubtedly be held at the highest price in market. It was unanimously adopted for general cultivation.

Manning's Elizabeth was proposed—C. M. Hovey regarded it as one of the most delicious of August pears, the only objection being its small size. F. R. Elliott had found it a tardy bearer. C. M. Hovey had also. T. Hancock had fruited it when four feet high and two years old. B. Hodge had also fruited it, early, but found it not equal to Bloodgood or Rostiezer. It remains on the list for trial.

Brande's St. Germain was proposed—J. C. Cabot said it was a fine pear, but is not worthy of general cultivation,—it is small, a poor grower, and liable to crack. It remains on the trial list.

The *Pratt* was similarly disposed of.

The *Ott* was taken up. Dr. Brinckle considered it the best summer pear known, having the flavor of the Seckel and a month earlier. F. R. Elliott found it excellent in Ohio, but doubted if experience was sufficient to place it on the general list. There were 17 votes in favor of placing it there, and 15 opposed. So it remained in its former position.

Ananas d' Ete, Fontenay Jalousie, and *Van Assene* were taken up, but did not pass beyond the list of those that promises well. F. L. Omstead, T. Hancock, and others, stated that the Fontenay Jalousie cracks with them; C. M. Hovey and A. H. Ernst said that Van Assene prove very fine with them, while J. S. Cabot and others found otherwise; and with T. Hancock it cracked very badly.

Doyenne Boussock—J. S. Cabot had fruited it for some years, and thought it lacks flavor, but is so large and handsome that he regarded it valuable. Many others corroborated this opinion, and it was placed on the list for general cultivation, but not unanimously.

The *Lawrence* pear was placed on the list of those which promise well, for trial.

The *Kirtland pear*, which several had found to grow well on the quince, was also placed on this list.

There were 19 votes against the *Duchess of Angouleme*, and 10 for it, for general cultivation.

There were 17 votes for the *Beurre Giffard*, as promising well.

The Compte de Lamy, although a fine pear, was not added, on account of its small size.

The Autumn Paradise was very generally and highly commended, and adopted for general cultivation.

The Duchess of Beri and *St. Michael Archange*, by 5 votes; the *Diller pear* by 7 votes, and the *Limon*, or *Beurre Haggerston*, by 4 votes,—were placed on the list for trial, as promising well.

The *Early Richmond* cherry, was placed by 11 votes on the list for general cultivation for culinary purposes.

The *Bigarreau Gaubaulis, Reine Hortense*, and *Early Purple Guigne*, were placed on the list for trial. S. Walker stated that the Gaubaulis was of remarkably crooked growth in the nursery.

The *Imperial Ottoman* plum, *Hudson Gage, Coe's Late Red, Blue Imperatria*, and *Reine Claude de Bavay*, were also placed on the list for trial.

APPLES—The *Smokehouse* appeared to have been much cultivated in Pennsylvania, and was highly commended. It was recommended for trial. The same disposition was made of the *Melon, Hawley* and *Autumn Bough*.

Red Canada or *Old Nonsuch*. A general expression in its favor, although S. Walker found it to overbear, and produce some very small fruit—others had found it spotted—14 votes placed it on the list for special localities.

Northern Spy—D. Miller, of Pa., had fruited it, and found it very knurly—S. Walker stated it was poor at Danvers, yet he said the first specimens he had received from Western New-York, were as good as any apples he ever tasted. S. Goodale said that in Maine some were very good, and others very poor. It was generally admitted as of high excellence, as grown in Western New-York. J. H. Watts said it generally sold at Rochester for $2.50 per barrel, and some the last spring, had sold in New-York city for $9.00. It was placed on the list for special localities by 22 votes.

The committee on Native Fruits reported the following as "*best*," among the new sorts present: *Jeffries* apple and *Richards; Susquehannah* peach; and *Moyamensing, Styre, Edwards' Elizabeth*, and *Quinnipiac* pears.

STRAWBERRIES.—*Jenny's Seedling* received 7 votes for placing it on the list for general cultivation; and *Burr's New Pine*, 15 votes. Willey did not receive the two-third vote, and did not go on this list.

The Congress adjourned to meet in two years at Boston. During its session appropriate resolutions were introduced and adopted, expressive of its loss by the death of A. J. DOWNING, and a Eulogy on his character, delivered on the evening of the 13th, by MARSHALL P. WILDER, which was eminently characterized with the ability, chasteness, and pathos, which this distinguished gentleman has at his command

Chester County Barn.

Eds. Cultivator—In answer to the query of a correspondent of St. Albans, in the last number, I propose to submit for his consideration, a plan on the model of a recently constructed *Chester* county double floored barn, and which, after an examination of various other prevailing styles, in different sections of our country, I believe *best* calculated to "combine [permanent] economy of construction, with convenience and saving of labor, in storing of hay and feeding the same."

Such a barn will require a locality inclining towards the south. Let the main barn, facing southerly, be 60 feet long and forty wide, with a leanto overshot extending in front twenty feet. I estimate this to contain near 100 tons of hay, &c.; then let hay houses extend 20 feet in width and height, in the form of an L, from the west end of the barn, of such length as to afford the additional storage necessary—say forty feet each.

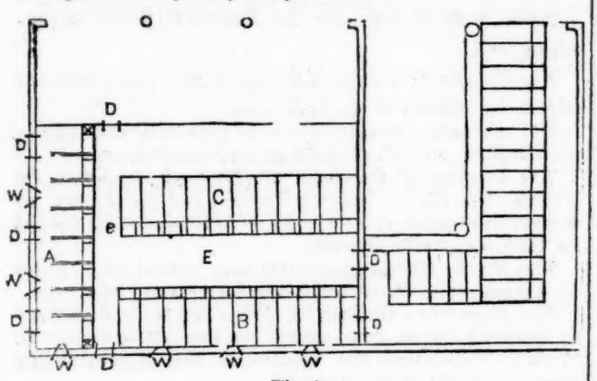


Fig. 1.

The ground floor of the main barn to be divided into stabling, as represented in Fig. 1. A, horse stables, 12 feet in depth, with mangers 2¼ feet wide for hay, and small troughs at the side of each stall, for grain. B, cattle stalls, hung with swinging gates, opening sideways. C, the same, but each stall having a separate gate entering direct from the yard. D, doors. E, main entry, eight feet wide, to hold feed chests, &c.; e, entry 5 feet wide, with steps up to door D, at the north end, and having an entrance into the horse stables at each end, the entries to be laid with small stone and mortar; the remaining space under the barn and overshot to be open to the yard, and furnished with box cribs, so that out-door stock can have their fodder placed under shelter in stormy weather; in cleaning out stables, the manure may also be placed under here for protection from the weather. W, windows.

If additional *stall* room is desired, the twenty foot hay houses might be divided by a 5 foot entry on the outside, and stalls opening to the yard, as C; or the under story might be open to the yard, as additional shelter to stock and manure.

Fig. 2 gives the elevation of the west end of the main barn, 40 feet; overshot 20—the former having in front the large doors, 16 feet, and bridge wall; height to the square 30 feet—to the second floor 8 feet; this covers a granary extending through the center 14 feet wide, boarded at the sides, and the haybins each side of it, 20 by 60 feet. It is lighted by two windows in front, and has a door and window at the north end. It is partitioned on one side

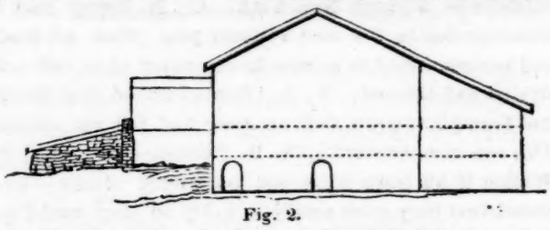


Fig. 2.

into bins for grain; the front end included in the overshot will make a good work shop. The third or threshing floor, eight feet higher, extends 14 feet in width (same as granary, which it covers,) from the bridgewall to the front of overshot, and is lighted by a small dormer in roof of overshot—(this may be scaffolded over head after the side mows are filled, for grain;) the large doors at the north end opening into a dormer covering the space between the bridge wall and barn. Each of the *main* hay mows should have a funnel four feet square, to pass hay to the entries below, and each of the overshot mows one to the yard. Grain from the threshing floor is passed into bins in the granary through three inch square holes, stopped with wedge shaped plugs.

And now, as to the advantages of this plan, which I believe are greater than embraced by any other that has come under my observation. Roofing is one of the most expensive parts of building—here is the greatest amount of storage, stabling and other accommodation under the same surface; the hay not descending to the ground floor, is less liable to be affected by damp, and affords a much less harbor for rats and other vermin. In the hurried season of harvest, produce can be disposed of in the deep bays in one-fourth of the time required to pitch it upwards, and in winter can be dropped *immediately* where wanted below—while the stables can all be shut tight in cold weather, to keep them warm. The hay funnels act as ventilators to carry off impure air; grain, when threshed, is put away in the granary without any labor of bagging and carrying; the horse stables are entered without passing through the cattle yard, and the cattle stalls are as conveniently arranged as in other plans. The space under the bridgeway may readily be converted into a carriage or waggon-house; hay-houses, as proposed, or sheds in their place, would afford comfortable protection from north and west winds. If any further information, respecting farming or other minutia, is desired by correspondents, I shall be pleased to furnish it. I suppose the main barn to be built of stone at least as high as the third floor, except in front; the overshot may be of frame, on pillars level with the granary floor, or its ends may be a continuation of the barn walls. The above general plan, varied in size and details, receives the general sanction of the practical farmers of Chester County. *Pa., 3d mo.*, 1852.

Gnawing of Rabbits.—J. T. Wilson informs the Michigan Farmer of the failure of several "*infallible*" preventives for this evil. He was told that any greasy substance, mixed with "lime, sulphur, hen-dung, tobacco juice, assafœtida, &c. &c.," [a rather unattractive compound, truly,] would be effectual; it deterred them for a few days, but they were soon at it again. A single mixture of lard and assafœtida was of no avail. A friend, however, informed him, (but he had not himself tried it,) that tanners' oil would repel both rabbits and sheep—that he would pay for all they would injure while the smell remained. Whether the oil will kill or injure the trees, is however, an interesting question.

Analysis of Soils and Pulverization.

Our readers are aware that we have always urged the insufficiency of simple analysis to determine the real value and productiveness of soils. Ingredients must not only be in sufficient quantity, but must be in such a state as to be *accessible* to plants during their growth. Nitrogen, for example, is admitted to be of the greatest importance to growing plants, yet every plant in the world grows in an atmosphere consisting of four-fifths of this ingredient in a free state, without being in the least benefitted by its presence; while the infinitessimal portions carried down as ammonia by the descent of rain, are eagerly caught and assimilated.

A late number of Silliman's Journal contains an analysis by D. A. Wells, of the soils of the best "bottom land" in Ohio, strongly corroborating this view of the subject. One specimen examined was from a field that had been planted successively for eighteen years, with corn, and had continued to yield without diminution, seventy to eighty bushels per acre. Another soil examined, had been cultivated fifty-one years, with forty-five crops of corn, and two or three of wheat, with scarcely diminished fertility, yielding now eighty bushels of corn per acre. And yet, D. A. Wells informs us, that these soils, "yielding with little or no culture, from seventy to eighty bushels per acre, *are no better, so far as their mineral composition is concerned, than many of the Massachusetts soils which have a reputation for sterility.*" The question immediately arises, to what do they owe their extraordinary productiveness? Doubtless in a considerable degree, to their large portion of organic constituents, but mainly, in the opinion of D. A. Wells, to the *fineness of their particles.* In commencing their examination, it was found that sieves ordinarily used would not answer; those were therefore procured, which were made of the finest gauze, the largest meshes of which by accurate measurement did not exceed *one-sixtieth of an inch in diameter.* One hundred parts of several specimens of soil passed through this sieve, left a coarse residue of from one-and-a-half to seven parts, and this residue was partly vegetable fibres and undecomposed organic matter. "This remarkable comminution of particles gives at once a clue to the secret of their great fertility. With this fineness an increased power is given to a soil for the absorption, retention, and condension of moisture, carbonic acid, and ammonia, an opportunity for the free permeation of atmospheric air, a facility to the rootlets of plants for extension, and consequently increased facility for receiving and appropriating nourishment." This is proved in a remarkable manner, by the double and often tripple crops obtained from thoroughly draining a wet soil, without the least alteration in its composition; and also by the utter uselessness of coarse manure badly mixed with the earth in a dry season.

A Successful Cultivator.—Col. Wilder stated in his address before the New Hampshire Agricultural Society, that a gentleman who makes the cultivation of the strawberry his special business, raised on five-eights of an acre, more than three thousand boxes. These he sold by contract for the season at twenty-five cents per box, or about twelve hundred dollars per acre.

Agricultural Resources of the Great West.

About a twelve month since, we journeyed through Illinois and Iowa, to form an acquaintance with the agricultural resources of the Mississippi Valley; and embodied the opinions then formed, of the capacity of the country for agricultural purposes, into a series of practical papers, which appeared regularly through the columns of the Cultivator. Up to the present period, nothing has been presented to our observation which would in the slightest degree influence a retraction of the high eulogies then given, in favor of this valley becoming the granary of this continent, and even of Europe, if necessity require it; and, indeed, every day's experience only strengthens the opinion that our first impressions failed in doing justice to the vast interesting field for investigation that at all points of the compass was spread before us. Having now selected a prairie home, and being actively engaged in the practical pursuits of the farm, some additional weight to the opinions given, may be expected, over those that were made at a period when we were simply journeying through the country, for the purpose of forming an acquaintance with its natural and artificial resources. To somewhat relieve a monotony in style, which too often pervades matter of fact essays, such as the discussion of nearly all practical subjects are apt to induce, the interesting points forming the subject matter of a few remarks, will be given under their respective appropriate heads.

Wheat—*the cause of its failure and the remedies.* The western farmers rarely plow their land more than once for wheat, and oats and wheat stubble are found the most convenient rotation? Summer fallows are rarely made, and when this old fashioned system is practiced, the work is generally done in the most slovenly manner. Occasionally wheat is sown among corn, and sometimes after the corn is removed from the ground, a single plowing is given, and the wheat is then sown, and harrowed roughly in. But little or no attention is given to the drainage of the land; well formed ridges are rarely made; no pains are taken to drain the soil by the use of the plow, and underdraining, even on the most retentive soils, is never practiced. Indeed the great aim of the farmers appears to be to sow a great quantity of land with any given crop, without stopping to investigate their abililty of properly preparing the ground for the requirements of the crop. This careless and unwarrantable practice obtains favor by the easy process by which crops are grown, when the prairie sod is first broken. In the preparation of prairie sod for fall wheat, the only course pursued is to break up the sod during the early part of summer to the depth of from 2¼ to 3 inches, after which the only labor necessary to ensure a crop of from twenty to twenty-five bushels per acre, is the sowing of the seed in September, and a thorough harrowing. Corn on sod, requires even less labor than wheat, and if the season be at all favorable, 40 bushels per acre may be expected, without any labor except the plowing and covering the seed. The labor and expense requisite to obtain 20 bushels of wheat, and 40 bushels of corn per acre, does not exceed $4; and the price of land being nominal, the single product of an efficient laborer, quite exceeds that which can be produced in any of the older states of the Union. The

great facility with which crops are grown upon a newly broken prairie farm, are among the most prolific causes of the backward condition of the agriculture of the western prairies. As has already been shown, a trifling amount of labor will almost to a certainty produce a fair average crop of wheat and corn, on a newly inverted prairie sod; and owing to the great depth of the vegetable soil, ranging from one to three feet, even on the high rolling lands, the inference is made, that the sod once broken will continue to yield abundant crops, with a trifling amount of labor. Experience has clearly shown the fallacy of this opinion, and although the soil contains all the elements requisite to produce bountiful crops of the cereal grains, for an almost indefinite period of time, yet the prevailing practice of husbandry appears admirably calculated to dispirit that portion of the farmers who depend upon the cultivation of bread stuffs. Contrary to the expectations of the first settlers of the Great West, the wheat growing business is subject to more casualties than is experienced in timbered countries; and in many cases the business has been abandoned, under the prevailing notion that a prairie soil, when subjected to a severe course of cropping, is unadapted to the growth of wheat. This opinion ebbs and flows, according to the result of the harvests; and seasons like the present, when the crop is almost universally a good one, it would find but few advocates; whereas, last year, the almost entire failure of the crop so far discouraged the wheat growers, that it was difficult to convince those engaged in the business, that the country was admirably adapted for the production of wheat, and that by good cultivation it might be made as profitable on the western prairies, as in any other portion of this continent. The practice that prevails in Illinois, would produce still more favorable results in Michigan and Ohio, and a similar system practiced in New-York and Pennsylvania, would not produce sufficient to defray the costs of harvesting the crop. The error is in the practice, and cannot in any respect be attributed to any natural defect in the soil, or to the rigorous character of the climate. Although the soil is free of stones, roots, and all other obstructions, yet the plowing is carelessly done, and much of the land is overgrown with weeds; and, on the whole, the agricultural prosperity of the country is in a worse condition than that of any other portion of the Union with which we are acquainted.

The remedy by which a more wholesome state of things might be brought about, may be speedily summed up. In addition to what appeared in the papers already prepared on prairie farming, but little need be added, as the plans pointed out, if honestly practiced, would secure to the western wheat grower, as large an average yield of wheat, for the labor expended, as could be obtained in any other portion of this continent, and that too, by the expenditure of a much less capital than would be necessary in New-York or Ohio. As some time has elapsed since those recommendations alluded to, appeared in the Cultivator, a mere summary may be given. A proper rotation of crops, by which wheat will be grown only once in a period of four years, is essential to secure success. During that rotation clover should intervene, and in fact, should be made to precede the wheat crop. Wheat after clover is a much more certain crop than when grown upon a purely virgin prairie soil. The clover roots are calculated to deepen the active soil, and the inverted clover sod, when a strong growth of clover is turned under, imparts a vigorous growth to the wheat plants, by which the roots obtain a strong and healthy growth, enabling the crop to endure the rigors of a severe winter. In all cases where drill culture can be successfully practiced, it should be adopted, as wheat plants standing in rows, and being deposited some four inches below the surface, take a much firmer root, and will not be nearly so apt to winter kill, as when scattered promiscuously over the ground. Liberally seeding the ground is of the greatest importance, and in an average of cases two bushels per acre will not be found too much, as the ground should be perfectly matted with a covering of plants at the setting in of winter.

The labor necessary to produce a crop of corn, by judicious management, might also be made to yield a crop of wheat. In this case the clover and timothy would have to be sown with oats or barley, and the corn would follow in succession after the clover. In some respects, corn is a better preparative crop for wheat than clover, for a bleak prairie country. The course to pursue when this rotation is adopted, is to plant the corn in drills five feet apart, making the hills in the rows average about 18 inches asunder. The corn would have to be worked lengthwise, or only in one direction. About the last of August the sowing of wheat may be commenced, and continued throughout September. The seed should be plowed in by the use of a small one horse plow, forming neat ridges of six furrows, thus making a neat water furrow at the center of each row. The corn in this case, should be harvested on the ground, leaving the stalks to stand, to protect the wheat plants from the severe winds and frosts of winter. After the frosty season has passed in the spring, the corn stalks should be cut up close to the ground, and carried off the field and burned. By this plan, nearly as much corn can be grown, as by the ordinary method of planting in rows in opposite directions across the field, and the yield of wheat will exceed what can be obtained by any other process, costing a comparative trifle in cultivation over and above what would be necessary to secure a good crop of corn. Other suggestions, applicable to the culture of wheat on the prairies, might be added; but if the systems recommended in the series of articles prepared by the writer during the last twelve months, be practiced, what is now a very uncertain, and in many cases, ruinous business, might become a reliable and profitable operation.

Indeed, in no portion of the world could the business of wheat growing be more extensively and profitably prosecuted, than in a very large portion of Illinois, Iowa, and Northern Missouri. An enterprising farmer, with ample means, might, if needs be, extend the business of wheat growing to almost any scale that his ambition might lead him. One hundred acres of wheat, to be sown among corn as recommended, would actually cost less labor to produce it, than would be necessary to produce 20 acres in New-England, where thorough naked summer fallows have to be made to secure a yield of 20 bushels per acre. The wheat crops in the prairies are not

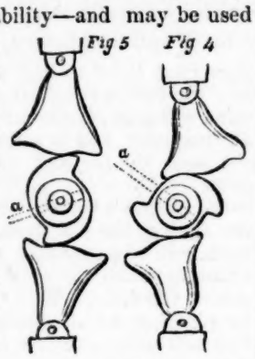
much subject to rust, and not very liable to lodge. The almost constant currents of wind that pass over the prairies, prevent these two drawbacks, which are the most formidable that have to be borne by the eastern wheat growers. Smut, which is so common in New-York and Pennsylvania, is almost unknown in the west. These, and other reasons that might be adduced, should be sufficient to convince any inquiring mind, that the prairies of the Great West must, so soon as public attention has been fully drawn to them, become the great and unrivalled granaries of this continent—yielding, when proper labor and capital has been expended, a much greater return in profits than can be had in any other portion of Christendom.

Corn—*its cost of production and profits.* The great staple of the northwest is corn, and it may be a matter of some curiosity to eastern farmers, to know precisely how much it actually costs a western farmer to produce a crop yielding, say 60 bushels per acre, and also the most successful methods of cultivation for the corn crop. Fall plowing is not usually practiced, and hence the land only gets a spring plowing before planting. After plowing, the ground is sometimes harrowed, and the next process consists in marking or listing the rows in opposite directions across the field, forming at the angles of the furrows, points or hills for the depositing of the seed corn, which is ordinarily done by hand, requiring the seed to be covered with a hoe. When the plants of corn become sufficiently strong to be seen distinctly in the rows, the plowing or horse hoeing, commences, which most usually consists of a shovel plow, sometimes a one horse plow, and in rare cases, a steel-tooth cultivator. From three to five dressings are given, and the crop is generally laid by, as the time of finishing the business of clearing the crop is styled, during the latter part of July. One able bodied man will easily attend twenty five acres of corn during the entire season; and when the labor is performed with care, an average yield of from 60 to 80 bushels per acre, may be anticipated. When all the cost of producing corn is fairly calculated, including the rent of land, it will be found to average about ten cents per bushel, which, of course, includes the harvesting of the crop. In favorable seasons, and under peculiar circumstances, corn can be produced at a less price than ten cents per bushel—but at that price it is safe to make the estimate for any given number of years; though to secure that result, and do justice to the land, the corn crop should be grown in regular order with other crops, yielding only one crop upon the same land, in periods of four or five years at most. The requisite elements for the production of corn are sufficiently abundant in a deep vegetable prairie soil, to produce, if necessity required it, twenty consecutive crops; but the average yield will not be so great as when it alternates with clover, wheat, and other crops.

A marked peculiarity in the climate of the entire Upper Mississippi Valley, and which strongly influences the pursuits of agriculture, is the extreme protracted and backward springs, and the equally lengthy and beautiful autumns. The cold rains, and chilly north-west winds, that prevail in spring, prevent the farmer from making as much progress with his seeding, as is usually done in mountainous regions of the country; and the planting of corn, from this cause, is frequently extended into June, even in latitudes as far south as 40 degrees. There the subsoil is calculated to retain an excessive amount of moisture, so as to endanger the rotting of the seed corn; a very reliable remedy may be adopted by every farmer, whether he farms in the western, eastern, or northern portion of the Union. This may be done by plowing the land in the autumn into ridges or ribs, the width required for the rows of corn. Four feet is the ordinary average, and therefore, to plow so wide a ridge with one furrow, a very heavy plow will be required, and a strong team, say three yoke of oxen, or three horses abreast. The process consists in plowing only one half of the land, and covering the unplowed portion with the active soil turned by the plow, guaging the width and depth of the furrow by the capacity of the plow, the strength of the team, and the distance the rows of corn are required to be apart. A plow that will turn a furrow fifteen inches wide, and ten inches deep, will form ridges the proper width for corn. The plow should be set so as to constantly throw the soil towards the unplowed land, in which case the furrow horse will be required to walk on the land, close to the edge of the furrow, securing by this means the open furrows from being filled up by loose soil; and the entire surface exposed to the action of the air, frosts, and the sun, will be new soil, or that which had been recently acted upon by the plow. By this system of autumn plowing, a man and a team may easily plow from three to four acres per day; and as each furrow will form a complete drain, the fall, winter, and spring rains will pass off the land, leaving the entire surface at all times dry, and in a finely pulverised condition. The soil from the top and sides of the ridges, will crumble down by the action of frost, and partially fill the furrows, so that when the season for planting corn arrives in the spring, the soil in the bottom and sides of the furrows, will be permeable, and be in the best possible condition to secure the early germination of the seed corn. About the first of May, the land should be again plowed for planting, which should be done by the use of a plow that will turn a furrow from 12 to 15 inches wide, and some nine inches in depth. Two furrows of the above proportions should be thrown together between each of the ridges, leaving unplowed a large furrow in the shape of a turnep drill. The two furrows being turned together in the shape of the crown of a ridge, and the soil being made extremely light by the action of frost, the ridge or crown furrows, thus made, will make the best possible seed bed for the germination and growth of the young and tender corn plants. The seed, of course, must be planted upon the top of those furrows, and as a deep water furrow of some nine inches in depth, will be on each side of the seed bed, an excessive amount of spring and early summer rains, will not have the slightest injurious effect upon the vitality of the seed, or upon the growth of the young plants. When the corn requires to be plowed, the middle furrow may be levelled down, and the after cultivation need not, in any particular, differ from what is ordinarily practiced. If such a system as the foregoing had been generally adopted by western farmers the past season, it would have added to the corn crop many millions of bushels, and the farmers would have saved the expense and trouble of replanting their crops. By this process, a much larger surface is exposed to the action of frost and air, and the ground is at all times in a suitable condition for the reception of seed. It will be found a great saving in the expense of plowing, and when the work is properly done, it will add largely to the average yield of grain, and lessen the amount of labor necessary to keep the crop clear from weeds. W. G. Edmundson. *Keokuk, Iowa.*

Dick's Cheese Press.

This admirable press, made mostly of cast-iron, was lately exhibited at Geneva on the grounds of the New-York State Agricultural Society by J. E. Holmes, of Holyoke, Mass., from which we have made the above figure. This press is remarkable alike for its ingenuity, simplicity, efficiency, and durability—and may be used for centuries without getting out of order. Figs. 4 and 5 show the manner in which the platform supporting the cheese is elevated by depressing the lever and weight. Fig. 4 exhibits the appearance with the lever *a* raised, and Fig. 5 the same borne down; the surfaces in contact merely rolling over each other, there is little or no friction. It is regulated by the screw operating in the upper bar. In order to try its strength, one of these machines was strained till it broke, when it was found that the pressure was equal to *sixteen tons*. Hence they are warranted to sustain a force of ten tons. We placed blocks of wood as large as a brick in the press, and found by the force of one hand on the lever that these blocks were flattened and the sides swollen out as if they were but bags of sand. The price of the press is $25, and it is doubtless the cheapest thing of the kind for large dairies.



J. E. Holmes also exhibited Dick's instrument for punching holes in iron, constructed on the same principle. This principle has a peculiar advantage as applied to punching, for by a proper form of the curves of the rolling faces in the instrument, the power can be increased or lessened at any part of the operation—the first movement in punching a hole requiring more power than after the removed portion of metal is nearly driven through. This instrument possesses such efficiency that a single person has driven a hole half an inch in diameter through a cold bar three eights of an inch thick by a single stroke of the lever.

Wens on Cattle, &c.

Eds. Cultivator—The cause of wens on cattle, is some local injury. They should neither be sacrificed nor eaten in that condition, but cured. Mr. F. Punderson, of Hudson, keeps a remedy that cures fistulas on horses, and might cure wens on cattle. Should it fail, however, the remedy would be to cast the animal, and with a long, keen sharp pointed knife, the flesh should be cut away around the place of discharge, sufficiently to remove to the bone, a tough pipe which will be found to have formed there. Nitric acid should then be poured into the wound, after which a few cleansings with water, at periods of a week each, will effect a cure. I have known it to be repeatedly tried, and ever without failure, even where the bone had been far gone with caries.

Mr. More's Farming.—Several of your correspondents allude to the success of Mr. More, whose farm received the premium from the State Agricultural Society for 1850.

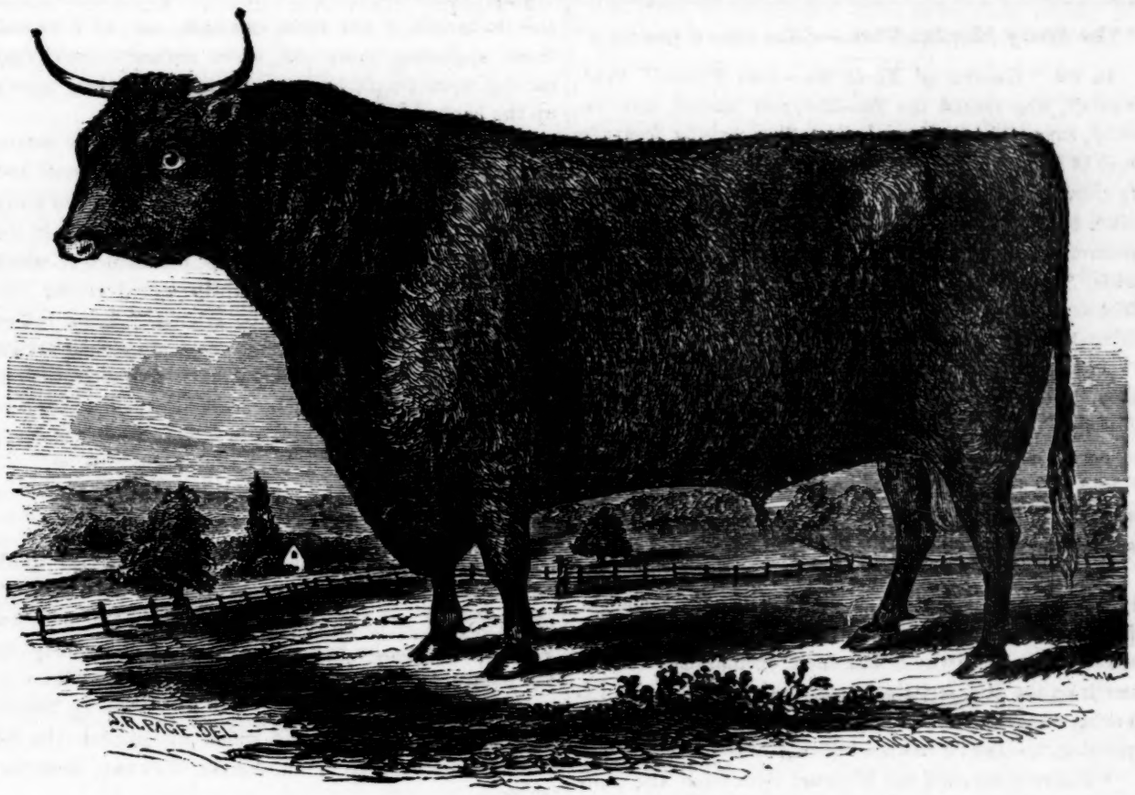
Had Mr. More been located twenty, instead of two miles, from one of the best markets in the country—had he been compelled to pay four shillings, instead of four cents, ber bushel, for the thousand bushels of lime he applied to his farm—had he been deprived of the hundreds of loads of manure which he was enabled to buy at a mere nominal price—had he been deprived of the opportunity of earning hundreds of dollars, during the leisure of his teams, for Mr. Van Rensselaer and the State Agricultural Society—had his large amount of garden vegetables, beyond the requirements of his own family, been worth no more to him than so much pursley, he would still have shown himself the good farmer, and perhaps the best in the state; but his success would have attracted much less public consideration or attention. J. F. C.

Drying Tomatoes.

[The following has been furnished us by a very skilful housewife, who is particularly successful in the preparation of garden products—we have tried her dried tomatoes in winter, and found them most excellent. Ed.]

The method is very simple. They are to be peeled in the usual way; then if very ripe pour off some of the juice, stew them slightly, sufficiently to cook them through, and salt them to the taste. Then spread them on earthen (not tin) dishes, and put them in a warm oven. The best way is to put them in a brick oven, when the bread is taken out, but a stove does very well. They cannot be dried in the sun like peaches; they are so juicy they need more heat. When dry, put them in bags, and in winter they only need soaking an hour or two, then stew and season with butter and pepper, and one would hardly distinguish them from fresh fruit.

To Fatten Poultry.—Shut them up in the dark, gorge them with boiled food, and allow them a small quantity of charcoal daily. Every meal that a man makes on such food adds a nail to his coffin.—*Ohio Farmer.*



Mr. Colby's Devon Bull Champion.

The first premium for Devon Bulls over three years old, at the late State Fair at Utica, was awarded to "Champion," owned by Mr. L. H. Colby, Scipioville, Cayuga county. The portrait of him, given above, is from a drawing made by Mr. J. R. Page, of Sennett, engraved by Richardson & Cox, New-York.

Champion was calved June 28, 1844—got by Rover, a Patterson bull, out of Venus, a pure Devon of Rufus King's stock, from Mr. Coke's, (Lord Leicester's) stock. Rover, the sire, was by Eclipse, Geo. Patterson's superior imported Devon bull—dam by Anchises, also imported by Geo. Patterson. Eclipse was bred by Mr. Bloomfield, on Mr. Coke's estate, Norfolk, England, and sent to this country as the best bull of his day. Anchises was raised by Lord Leicester for his own use.

Champion has heretofore received the following premiums: 1st premium at Poughkeepse, N. Y., for the best bull calf—also same year at the American Institute. 1st premium at the American Institute for the best 1 year old, 2 year old, and 3 year old bull, and the 1st at Hartford (Ct.) County Show, in the fall of 1848

"Things that I have Seen."

The Hampshire Express, (Amherst, Mass.,) copies the article under this head, from the Cultivator of August, and appends to it the following list of things which the writer might see if he would visit East Hampshire, where prudent farmers must be more common than in many other sections of our country:

1. He would see fences on many of our farms, so well mended up before planting, and kept in so good order through the year, that the cattle, honest creatures, never suspect it possible to get over or through them.

2. He would see farmers so considerate of their own interest and of the public good that instead of letting their swine run in the road, they keep them in suitable pens, giving them a dry place to lie and a wet one to wallow in, and by putting in leaves, dried muck, road scrapings, anything which they can easily come at, so as to make five, eight, or ten loads of compost to each grunter.

3. He would see farms so free from bushes, windfalls and waste corners, that he would be tempted to alter the phraseology of the wise man, and say, "I went by the field of the industrious and the vineyard of the man of understanding, and lo, it was all grown over with corn, grass, and other useful products, excepting a few beautiful trees under whose shade the herds might repose in comfort, and here and there a lovely copse which it would be infamous to cut down."

4. He would see farmers, who *practice* well, not over fond of theories, but when something new is shown to be good, ready as reasonable men, to adopt it.

5. He would see farmers who are unable to cultivate flowers half their summer, but who have an excellent kitchen garden, with flowers tastefully interspersed, the whole presenting such a picture of beauty and utility, as could hardly be surpassed, and whose children, instead of roaming in idleness, are oftener found reading the best agricultural and other periodicals.

6. He would see farmers who have a place for every tool, and every tool in its place, not forgetting that their tools wear out fast enough without suffering them to rot and rust out by exposure to the weather.

7. He would see farmers, who pay for agricultural papers much more cheerfully than for trash; who are justly conscious that they know much of farming, but are desirous of knowing more, willing to learn from a publication, a scientific man, or a practical farmer, as best they can. In short, he would see such a spirit of inquiry as would convince him that the farmers of this region will soon leave behind them others of regions more favored in soil and climate.

8. He would see that as good husbandry advances, farmers become less officious in their neighbors' business, and more intent upon their own; and that in this respect they are already ahead of merchants, lawyers, doctors, ministers, loafers, gentlemen, and all the rest.

"The Early Mandan Corn.—(*Zea mays v. præcox.*)"

In his "*Genera of North American Plants*," Prof. Nuttall, who visited the Mandans, and named this variety, says: "Stem, very low, spathes arising from the base of the culm"—in other words, *keeping comparatively close to the ground*, in accordance with a principle often obtaining amongst other plants that extend into severer climates—that of shortening their stems.* He adds, "successfully cultivated by the aborigenes of the Missouri to its sources [?] ripening in a climate where no other variety could exist."

George Catlin also in his "*Illustrations of the Manners, Customs, and Condition of the North American Indians*," says, "The Mandans raise a very small sort of corn, the ears of which are not longer than a man's thumb. This variety is well adapted to their climate, as it ripens sooner than the other varieties, which would not mature in so cold a latitude."

It is generally understood that Indian corn indigenously is a tropical plant, though the Pilgrims who landed on Plymouth Rock found it cultivated by the Indians in that vicinity; but why it has been acclimatized further north on the Missouri than in any other region, the following remarks from Catlin's work, may assist in explaining. though he has not referred to this subject.

"I have descended the Missouri river from the Mandan village to St. Louis, a distance of 1800 miles, and have taken pains to examine its shores; and from the repeated remains of the ancient locations of the Mandans, which I met with on the banks of that river, I am fully convinced that I have traced them down nearly to the mouth of the Ohio river; and from exactly similar appearances, which I recollect to have seen several years since in several places in the interior of the state of Ohio, I am fully convinced that they have formerly occupied that part of the country, and have from some cause or other, *been put in motion*, and continued to make their repeated moves until they arrived at the place of their residence at the time of their extinction, on the upper Missouri.

"The marks of the Mandan villages are known by the excavations of two feet or more in depth, and thirty or forty feet in diameter, of a circular form, made in the ground for the foundations of their wigwams, which leave a decided *remain* for centuries, and one that is easily detected the moment it is met with. After leaving the Mandan village, I found the marks of their former residence about sixty miles below where they were then living, and from which they removed (from their own account) about sixty or eighty years since. Near the mouth of the big Shienne river, 200 miles below their last location, I found still more ancient remains; and in as many as six or seven other places between that and the mouth of the Ohio, and each one, as I visited them, appearing more and more ancient,—convincing me that these people have gradually made their moves up the banks of the Missouri."

George Catlin further remarks that after the season for *green* corn is over, "the remainder is gathered and dried on the cob before it has ripened, and packed away in *caches* (as the French term them)—holes dug in the ground some six or seven feet deep, the insides of which are in the form of a jug, and tightly closed at the top. Now it is remarkable that "the Pilgrims" found Indian corn buried in the same manner, soon after their arrival at Plymouth; and Catlin might have found in this circumstance an argument in favor of his theory; for two tribes living 3,000 miles apart, in all probability derived this singular custom from the same source. D. T.

* Thus the *bay-berry* or *wax myrtle*, grows two or three times as high in South Carolina, as it does in Western New-York; and the gigantic *live oak* of Florida dwindles to a shrub on the eastern shore of Virginia.

In regard to Indian corn extending into higher latitudes—the earliest ears will be the most perfect, and the later be cut off by the frost. So in selecting seeds for the kitchen garden, the finest and earliest specimens are generally preferred; and though the change from year to year may be slight, yet the *accumulation* of changes in the course of an age, may be very considerable.

Potato Disease.

The Legislature of Massachusetts, in the year 1851, offered a prize of $10,000 to any one who should satisfy the Governor and Council that, by a test of at least five successive years, he had discovered a sure remedy for the potato rot. Several communications have been received on this subject, which are published by the authority of the legislature, of which we publish the following summary by Hon. Amasa Walker, Secretary of State:

Although these communications may not furnish any perfect cure or preventive of the potato disease, yet they agree in so many important points, and offer so many valuable hints, relating to the nature, cultivation, preservation, and improvement of the potato, that they cannot fail to be of great public utility. The similarity of views expressed by the most intelligent and experienced writers, relating to the nature, cultivation, disease, and cure of the potato, is truly remarkable, and we think auspicious. Among the principal points, relating to which there is a general concurrence, are the following:

Soundness and vitality of the Seed.—Renewing the seed from the ball of healthy vigorous plants every few years, even resorting to the native place in South America, and taking the seed from the wild potato, is considered important. When potatoes are to be raised from the tuber, sound, healthy, whole potatoes are recommended for planting. Cutting potatoes is decidedly condemned. Anything which impairs the vitality of the seed increases the liability to disease.

Quality or kind of Soil.—A dry, light, loose, warm soil, is considered necessary to the soundness and health of the vegetable, as well as to its richness and flavor, the latter depending quite as much on the quality of soil as on the variety of seed. A wet, heavy, compact soil, directly promotes the disorder. Far up on the side of a mountain or hill is a favorable location for the growth of the potato; and new land contains more of the qualities requisite for its nourishment and health, than old or worn out soils.

Influence of atmosphere.—Potatoes should be as little exposed to the air as conveniently may be. Their natural place is under ground. By too much exposure they become poisoned, and turn green. Some recommend depositing them for the winter in holes under ground in a dry soil; or if kept in a cellar, to preserve them dry, in small quantities, in sand; and to keep them cool. Keeping large quantities in a body in the cellar is by some supposed to promote heat and putrefaction. Planting in the fall is recommended by some, as potatoes left in the field, over winter, are observed to come forward earlier in the spring, to grow more vigorously, to get ripe earlier and before the blighting rains in August, and to be more sound, fair, and healthy.

Manures.—All antiputrescents, such as lime, wood-

ashes, pulverized charcoal, plaster, salt, nitrogen, &c., are believed to contribute directly to the health of the potato, as well as to add to its richness and flavor; and, of course, to prevent putrefaction and disease. Of other manures, well-rotted compost is preferred. Stable manure is too strong and heating, and produces ill-flavored, unhealthy potatoes, and is decidedly condemned.

Disease, Contagion, Old Age, and Death.—These are common to vegetables as well as to animals. All are liable to disease, some more, some less, according to circumstances, predisposing causes, and preventive means. Some vegetable diseases are believed to be contagious. The present disease is thought by many to be of that class. One field of potatoes is liable to take the disorder from another field. Potatoes are predisposed to disease, by bad cultivation, old age, bad soil, bad manures, sudden changes of weather, warm rains, &c.

Ravages of Insects, Fungi, &c.—The best writers consider the ravages of insects as at most but a predisposing cause, rendering the potato more liable to disease by enfeebling the plant. By many writers insects are considered as remotely affecting the potato; by others, as having no effect at all. The fungus on potatoes is not the cause of the rot. It finds the potato, previously diseased, a fit subject for its operation.

The general conclusions to which the facts presented in these various communications seem to lead us, are—

1. That the disease has a striking resemblance to the cholera, and probably exists in the atmosphere.
2. That it is doubtful whether any specific cure has been, or ever will be discovered; but
3. As in cholera, certain preventives are well ascertained, by the application of which, the liabilities to disease may be greatly lessened.
4. That by obtaining the soundest seed, by planting in the most favorable soils, and by using the most suitable manures, we may have a good degree of confidence in the successful cultivation of this useful vegetable.
5. That we may expect, that like the cholera, the potato rot will become less and less formidable from year to year, and eventually subside into a mild and manageable epidemic, if that term may be used in such a connexion.

The several points on which there is an unanimity of opinion, are worthy the especial attention of farmers. By a careful selection of seed, and locality, and particular reference to the kind of manure used, very much of this disease may be avoided. If facts like the above, well substantiated by experiments in all sections of the country, could be presented to the entire mass of farmers, and they would govern their modes of culture by rules so established, we cannot well estimate the increase which would result in a single year in a crop so extensively cultivated as the potato.

Lime Burning.

Dear Sir—The informaton asked for in your August number, by Isaac A. Clark, "as to the best mode of burning lime for agricultural purposes," is important to farmers, and I wonder there has been no premium offered by any of our agricultural societies, for the best constructed lime kiln; there has been some talk about improvements, but as the old form is still kept up by those who are largely in the business of burning lime, we must believe there has been no real improvement yet made.

In the 4th vol. of the "American Farmer," page 388, there is a drawing of a square kiln with two eyes, and a description of it, by Edward Stabler, Esq., of Montgomery county, Md., but I cannot conceive any advantage in that form. The late Dr. Ducatel, geologist of this state, recommended kilns to be made twenty feet high, and the limestone to be broken small. All practical burners in this vicinity say they will not burn out when more than 16 feet high. Some men from Pennsylvania have burned lime quite recently, in the neighborhood of Frederick, in temporary kilns, constructed something like brick kilns, with satisfaction to their employers; they burned 1,800 bushels, with 32 cords wood. I expect them to burn a small kiln for me very soon; their charges are for 2,000 bushels and over, two cents a bushel—under that quantity, two and a half cents a bushel. The advantage of this mode is, you can have the lime made where you wish to use it. Your correspondent wishes to know "the most durable material to build of." For lining, firebrick or soapstone is best. In order to get at "the cost per bushel for burning lime," the price of fuel, labor, stone, &c., must be known; here, coal burned, (in a drawer, or perpetual kiln,) is the cheapest. Coal is worth about $3.50 a ton; wood, $2.00 to $2.50 a cord. Lime is sold at the kilns, coal burned, at 10 cents, and wood burned at 12½ cents a bushel. Wm. C. Hoffman. *Pomona, (near Frederick,) Aug.* 9, 1852.

Cream Thermometers.

Thermometers, such as C. H. Powel, of Poughkeepsie, wants, are made. There is one in this neighborhood; it was obtained in Philadelphia, and is a German article. Two glass tubes, one covering the other, and the degrees marked on a piece of paper between the two tubes, with two scales—on one side, "Thermometer nach Fahrenheit,"—on the other side, Centigrade or Reaumer, I forget which. It being externally all glass, if carefully handled, is "durable and easily cleaned." Wm. C. Hoffman. *Pomona, (near Frederick,)* 1852.

Cheap Ice Houses.

Mr. R. R. Wright, asks the best method of constructing small ice-houses; and as I suppose he means such as shall cost but a trifle, and yet preserve ice enough for use on a medium size farm, I will answer his inquiry by describing a method that has been in use by my brother for several years, that has given him perfect satisfaction.

He selected in a *porous* soil on the side of a hill, for convenience of access, and dug a square hole about ten feet deep, and six feet across. He then took some square pieces of timber of the length of the hole, and four inches in thickness. To the outside of these timbers, he nailed rough boards, so as to make a square crib or box, with the boards on the outside. He then placed this in the pit, and lined up on the inside of the timbers with more rough boards, so that he had a double boarded crib with a space of four inches between the internal and the external boarding. This space was filled with spent tan bark, or saw dust. There was no floor to the pit except peices of boards covered with saw dust, and if the ground be not porous there should be a drain to carry off the water from the ice as it thaws. It is necessary that the ice pit should be ventilated. Such a pit can be made by any one, and when the ice is formed it should be packed nearly full, fitting pieces of ice so as

to pack closely as possible. The top should be covered one or two feet thick with straw, and over this should be placed a loose roof of boards, that will exclude the snow and the rain, yet will not prevent the access of air.

An ice pit, of the size indicated, will contain sufficient ice to supply all the wants of a large dairy farm for the entire season—and as it *costs* nothing but a little labor, one should be made on all farms where this luxury can be obtained. Others will doubtless describe more elaborate and expensive as well as better structures, but some may be induced to try this method of preserving ice, who would not be willing to incur expense.

It may be that level ground would be preferable to a side hill, but such a situation was chosen by my brother, and he is highly pleased with it. C. H. Cleaveland.

To Cure Hams.

Ed. Cultivator—As I have seen numerous receipts for curing hams, and as I have tried the annexed for several years, and found it to excel every other in my estimation, I take the liberty to send it to you, that you may publish it for the benefit of any who may be disposed to try it. By letting my ham remain in the pickle, it is less trouble to keep it than by any other method which I have found, and it keeps sweet and tender all summer.

Take a barrel, and turn over an old pan or kettle, and burn cobs, (I think the best,) or hard wood, for seven or eight days, keeping water on the head to prevent drying. Make a pickle with eight pounds of salt, six ounces saltpetre, two quarts of molasses, and three gallons of water, to one hundred pounds. Boil and skim the pickle thus prepared. Then pack your ham in the barrels, and when the pickle is cold, pour it on to the meat, and in four weeks you have excellent ham, very tender, and well smoked. P. F. E. *Nashua, N. H.*

The True Course.

With energy for prompt and vigorous action, and capacity for sober thought and sound reflection, a man may enter upon business with some assurance of success. His home will exhibit the best picture of his true character. What he undertakes is well done. His fences are in order—there is an air of neatness and thrift about his dwelling and out-buildings; his grounds are laid out with reference to beauty as well as convenience—ornament and use have been consulted in planting out his fruit and shade trees, and the garden evinces that his wife and daughters have joined him in his cultivation. He does not waste the long winter evenings in idleness, nor do his family neglect this season of improvement. While his children are engaged in the rudiments of learning, he surveys the action of our National and State Legislatures; and studies thoroughly the policy by which both are guided. His family do not content themselves with the light reading of the day, but history, biography, morals and religion receive a due share of attention. They lay up in winter, from reading, conversation and reflection, a harvest of more value than the bounties of autumn. The mind thus stored, casts light upon any vocation. It cheers the house-wife in her round of duties and lightens the labors of the field. *Address of* Hon. T. Jenkins *before the Oneida County Ag. Society.*

Give a portion of each day to reading, and study. Think not because you are a farmer, literary acquirements are useless. They are as necessary to the full attainment of a knowledge of agriculture, as of any other science.

Jefferson County Agricultural Grounds.

At the invitation of the President of the Agricultural Society, we rode down yesterday to view the improvements made and in progress at the Society's show grounds, which were merely enclosed for last year's exhibition. Recently the old building in the rear of the Court House has been taken down, removed to the fair grounds, newly covered and added to, making it now a very spacious and comely appearing building. It is now 105 by 60 feet, with an addition in the center, on one side, extending back 15 feet, and 30 feet long, forming a platform and the speaker's stand, elevated some four or five feet from the floor. In front of this is the secretary's desk. Through the center of the building is to be a row of tables for the exhibition of domestic manufactures, fancy articles, needle work, specimens of art, &c., &c., and around the whole, except the recess for the platform and the speaker's stand, there are twelve rows of seats, elevated one above another, so as to render them comfortable, and in full view of the whole Hall, and capable of accommodating over two thousand persons. By placing temporary seats on the floor, 3,000 can comfortably be seated within the Hall.

A temporary building is to be erected on the west side of the Hall for the exhibition of agricultural implements, machinery, &c., which, with the one already built on the east side, for dairies, grain, vegetables, &c., will afford ample room for the occasion.

Permanent pens are erected around by the fence, and a large number of posts are firmly set in the ground, to which cattle and horses may be hitched. The old stumps have been dug up and removed, and the surface is being leveled. A good well has been dug within the enclosure, which will furnish the water required for man and beast. The committee will provide feed for the cattle, which will not be a charge upon the exhibitor. Arrangements have been made with the Railroad Company, to transport all animals or articles designed for exhibition, *free of charge*, if presented on Wednesday, the day before the fair commences. Passengers taken at half price from any station on the road, and from Kingston. It is hoped that this arrangement may induce a large number of our Canadian neighbors to visit us, and to exhibit to our farmers some of their choice stock.

Great credit is due to the Society for their liberality in the purchase and improvement of the grounds, and in a few years, if the same enterprise is manifested, it will become a very attractive spot. We doubt whether any County Society in the state is as well provided for in this respect, as Jefferson. Indeed, the whole arrangements are on the most liberal scale, and cannot but meet the approbation of the farmers who have so liberally contributed to the purchase and improvement of the grounds. The work, thus far, has principally been under the direction of Hart Massey, Jr., Esq.—*Northern Journal.*

Culture of Cranberry Vines.

The variety mostly cultivated in New-England are hardy and prolific

They can be raised on upland on rather moist loom—but do the best on low, damp or moist *meadow land*, with a little sand put around the plant.

They may be planted out 1½ to two feet apart, each way.

Two feet apart, it will take 10,000 plants to the acre; if on low ground it should be pared, plowed, or burnt over, to take out the grass or weeds, and cultivated for one or two years, until they cover the ground. The yield after that is from 150 to 250 bushels per acre. They are usually gathered with a cranberry rake, to be found in any agricultural store.

It is not necessary to flow meadows in order to make them productive. F. Trowbridge.

An Enormous Tax upon Farmers.—The dog population of the United States is estimated at about two millions, and the expense of keeping them at upwards of $10,000,000 per annum.

NEW PUBLICATIONS.

REPORT ON THE WORLD'S FAIR. By Col. B. P. Johnson, Cor. Sec. N. Y. State Ag. Society. C. Van Benthuysen: Albany.

This volume comprises a full description of Crystal Palace and the Great Exhibition, having reference more particularly, however, to those departments which have a practical bearing upon the interests of this country, and are most useful and important. Mr. JOHNSON had an excellent opportunity of judging correctly of the exhibition, as he was one of the jurors and a member of several committees, and has presented to the public much information of a desirable and reliable kind. The book contains a list of the awards to American contributors and descriptions of many of the more prominent articles of interest on exhibition.

LIFE AND WORKS OF ROBERT BURNS. By Robt. Chambers. Harper & Brothers.

The world will never tire of studying the character and admiring the writings of the Poet Farmer. Those who are already familiar with the history of BURNS will find enough that is new in this edition to repay a careful perusal. Though often open to criticism and subject to censure, we cannot avoid saying in his own language,

"A man's a man for a' that."

BISHOP BUTLER'S ANALOGY OF RELIGION to the constitution and course of nature, with an analysis by Rev. Robt. Emory, D.D., and a life of the author. By G. R. Crooks. Harper & Brothers: New-York.

This work, which in point of sound logic stands unrivalled, which no study can exhaust and none but the deepest can comprehend, which no sophistry can subvert and no reasoning overthrow, has been published in an accessible form, with valuable additions.

CICERO'S TUSCULAN DISPUTATIONS. By Chas. Anthon, L.L.D. Harper & Brothers: New-York.

Another ably edited volume of classics commends itself to the scholar. Its author and editor need no comment.

A SCHOOL FOR FATHERS—an old English Story, by T. Gwynne. Harper & Brothers.

An English gentleman, with court manners and few brains, attempts to make a fine gentleman and a statesman of his only son, who has passed his boyhood in the country, and has no taste for fashion and etiquette, the event of which is very unfavorable to the father's purposes, resulting in a duel fatal to the son, which adds to the happiness of several other persons.

THE PERSONAL ADVENTURES OF OUR OWN CORRESPONDENT IN ITALY, by M. Burke Honan. Harper & Brothers, New-York.

Reminiscences of travel, in which more of character than local description, appears—more of incident than philosophy—more of private life and manners than political speculation. It is written in the free, hearty spirit of a man who has travelled for his own amusement, and writes a book for the same reason.

THE INSTITUTES OF ALGEBRA. By G. B. Docharty, L.L.D., Prof. of Mathematics in the New-York Free Academy. Harper & Brothers.

This treatise on Algebra proposes to make the science attractive and interesting to the youthful mind, as well as to advance the student as far as the requirements of a college course. Some of the more difficult processes seem to be simplified somewhat, but upon a careful examination, we do not discover anything particularly original or distinctive in the work. The series of DAVIES and that of ROBINSON cover the ground so completely that other works are to a great extent either keys to them or servile imitations of them.

ANNA HAMMER—A Tale of contemporary German Life—translated by A. H. Guernsey. Harper and Brothers.

This makes No. 173 of Harper's Library of Select Novels, and contains spirited portraitures of German life and character.

THE CLIFFORD FAMILY, a tale of the Old Dominion. By one of her Daughters. Harper & Brothers: New-York.

This is a story written in the olden style, and savors more of the interest we feel in one of the Waverly novels than of the revolutionary style of fictitious writing, which Dickens, Bulwer, and Thackeray have introduced. It is carefully, methodically written, and tells a tale of domestic life, of which the home affections and moral virtues make a large part.

ATLANTIC AND TRANSATLANTIC SKETCHES, Afloat and Ashore—by Capt. Mackinnon, R. N. Harper and Brothers, New-York.

The writer sketches in a graphic, pleasing way, his opinions of our scenery, our customs, our character and destiny, as well as his adventures here and there, in his extensive travels. We must do him the justice to say that he has taken a broader and more just view of this country, than most Englishmen have done, and though he does not penetrate very deeply into the nature of things, he has, on the whole, flattered us considerably.

MEMOIRS OF THE LIFE AND WRITINGS OF DR. CHALMERS, vol. 4, by Rev. Wm. Hanna, L.L.D. Harper & Brothers, New York.

This volume closes the biography of one of the most eminent divines the world has ever produced. In symmetry of character, intellectual strength, oratorical power, and the influence which he exerted on his age, he is seldom surpassed. The present volume is peculiarly interesting, as it contains a full account of the secession of the Church of Scotland, and the controversy in which Dr. Chalmers was involved.

PICTORIAL FIELD BOOK OF THE REVOLUTION, No. 27—BLEAK HOUSE, No. 6.

We acknowledge the reception of the above Nos. of these popular works.

The works of Messrs. Harper are for sale by E. H. Pease & Co., of this city.

FARDOROUGHA, THE MISER. E. Littell & Co: Boston, Mass.

This story of Irish character has appeared in the numbers of Littell's Living Age, and abounds in scenes of thrilling interest. The characters are drawn to the life. Old Fardorougha is as inexorable as Shylock—his money is his god and his life. Conner is a fine specimen of the generous, noble, warm-hearted Irishman, and the gentle Una is quite an ideal woman. The book is well worth the reading.

HOME AND SOCIAL PHILOSOPHY. By Chas. Dickens. G. P. Putnam: New-York.

This is one of the series of Putnam's semi-monthly library, some one of which every traveller must have met. This volume is compiled from Household Words, and like all the series is instructive and entertaining.

NOTES FOR THE MONTH.

Postage on the Cultivator.—By the new law, passed August 30, 1852, and which goes into effect on the first of this month, the postage on The Cultivator is reduced to one uniform rate to any part of the United States, viz: *Six cents a year* to regular subscribers, payable quarterly in advance. The postage on single numbers, (called by the law, "transient matter,") will be one cent per No. if prepaid, or two cents per number if paid where delivered.

The State Fair.—The reader is referred to another page for an account of this Fair, which passed off very greatly to the satisfaction of its managers, and, we believe, to the thousands who attended it. The number in attendance was not as large as at Albany and Rochester. Multitudes were undoubtedly kept at home, by the fear of the Cholera, now so prevalent in several places in western New-York. The receipts were $8,125,41, about the same as at Syracuse in 1849. The income was unquestionably very considerably lessened by a fraud practiced in the exchange and transfer of badges. Six persons were arrested, while engaged in this traffic, and sent to the police office.

To avoid this loss in future, we would suggest an entire change of the rules of admission to the show grounds. We would dispense with all badges, except to the officers and judges, who must necessarily have free access to the grounds at all times, and substitute therefor, the ticket system. By letting all persons enter their articles for exhibition, and drive their teams on to the ground without charge, the necessity for badges will be obviated; and to prevent a rush upon the grounds while the judges are engaged in their examinations, let the charge for admission up to Wednesday night, be twenty-five cents, and on Thursday and Friday one shilling, the same as at present. In this way, as all the tickets would be given up at the gate, all possibility of fraud would be avoided, while no injustice would be done to any one.

Fancy Lop-eared Rabbits.—We are indebted to R. H. Van Rensselaer, Esq., of Morris, Otsego county, for a beautiful pair of these rabbits, from recent importations from London. For portraits and descriptions of these fancy rabbits, see our last vol. p. 176.

Currant Wine.—We have been presented by H. W. Ferry, Esq., of Utica, with a bottle of currant wine, three years old. It is decidedly superior to any we have before tasted. Mr. F. furnished us the recipe by which it was made, which we shall publish in season for another year.

Grapes.—Mr. C. P. Williams, of this city, has sent us a sample of the fine and well grown foreign grapes which he has succeeded in maturing in a "cold house" in this city. He is so well pleased with his success, that he is now erecting a new house, 130 feet in length, for growing grapes. So far, we believe, every one who has undertaken to grow grapes in this way, has found the experiment entirely satisfactory; and we are pleased to hear from so many quarters of the country, that very many are now making preparations to engage in the business. It is clearly proved that with a comparatively trifling expense for a grapery, there is no difficulty in growing an abundant supply of all the most delicious foreign grapes.

Flower Seeds.—Hon. N. Coe, formerly of this state, but for the past two years a resident in Oregon, has sent several parcels of flower seeds gathered from the wild flowers of that territory, for which he will please accept our thanks. We shall give them a trial.

Mr. Vail's Cattle Sale, our readers will remember, is to take place at his farm near Troy, on the 13th of this month. It will be seen by his advertisement, that Mr. Vail proposes to offer his whole stock to the public, reserving only the right to make a first bid on six head. This herd includes several recent importations, and the choice animals reserved from his previous sales, and offers inducements rarely to be met with in this country.

☞ Wm. Bacon, Esq., Richmond, Mass., will please accept our thanks for the Transactions of the Massachusetts Ag. Societies for 1850 and 1851, two handsomely printed and valuable volumes, issued by the state. We have given, in another page a summary of the inferences drawn from a great number of papers, communicated to the Secretary of State in consequence of an offer of $10,000, made by the Legislature of that state, for the discovery of the cause, and a remedy for the disease in the potato. Though we discover nothing particular new in the views of the several writers, the conclusions drawn from their combined statements, will be read with interest.

Patent Ox Yoke—An ox yoke, patented by Mr. John Chase of Craftsbury, Vt., and exhibited by S. E. Beard, received the first premium at the N. Y. State Fair. The bows are so arranged as to slide in the yoke, allowing the cattle to change the position of their necks, to a certain limit, at pleasure. The sliding of one bow toward the middle of the yoke compels the same motion in the other, thus keeping the centre of draught always the same. This effectually prevents the crowding of cattle, for their necks are drawn so near together that it becomes impossible. The practical operation of the yoke is spoken highly of by farmers who have used it. Specimens may be seen in this city at Emery & Co.'s Agricultural Warehouse and at the State Agricultural Rooms.

New Brunswick Ag. Society.—The Journal of this Soc. for 1852, making a pamphlet of 134 pages, has been received. It is filled up with proceedings, addresses before Ag. Societies, prize essays, instructions for farm management, &c.,—forming altogether a creditable and valuable collection of agricultural matter. Considerable attention is being paid to improved farming in New-Brunswick, as the increasing number of subscribers to agricultural papers, and the above report, fully demonstrate.

The Highland and Agricultural Society of Scotland, recently held its 29th Annual Show. It is one of the oldest societies for the improvement of agriculture, in existence, dating its origin back to the year 1784. It held its first show in 1822, when the number of cattle and sheep shown were only sixty-seven, and the premi-

ums offered only seventy-eight pounds. The present year there were exhibited 1,346 animals, and about $4,500 were paid in premiums. The Prize Essays and Transactions of this society possess great value, and Dr. Anderson and Prof. Johnston, both of whom have been connected with the Society, have contributed very much to the progress of Scientific Agriculture.

A Draining Plow.—The Mark Lane Express contains an advertisement and full description of a plow for sinking drains. The work is all done under ground—the ditch excavated and tiles laid invisibly, under your feet. The machine is quite complicated and expensive, but the owners advertise to lay drains better than can be done by hand, at one-third less expense. Could some such machine be introduced into this country, it would turn the attention of farmers to the much neglected, but very important business of draining their land.

A Substitute for Guano.—The Royal Agricultural Society of England offer a prize of £1,000, and the gold medal of the Society, for the discovery of a manure equal in fertilizing properties to the Peruvian Guano, and of which an unlimited supply can be furnished to the English farmer at a rate not exceeding £5 per ton.

Red Ants.—A correspondent wishes to know if any of our readers can tell him how to expel or destroy the small red ants. He can neither drown or scald them out.

Albany and Rensselaer Hort. Society.—The autumnal exhibition of the Albany and Rensselaer Horticultural Society took place on Tuesday and Wednesday, the 13th and 14th ult. The display of fruits, flowers and vegetables exceeded that of any former exhibition. The Society met at 12 M. on Tuesday, its President, Dr. Herman Wendell, in the Chair, who in an appropriate and feeling manner, called the attention of its members to the death of the late A. J. Downing, editor of the Horticulturist, and offered the following resolutions which were unanimously adopted:—

Resolved, That the members of the Albany and Rensselaer Horticultural Society, in common with others of the Pomological, Horticultural and Agricultural portions of our citizens, mourn sincerely the death of the late A. J. Downing, who has been more instrumental, than any other individual, in extending a taste for, and promoting the love of, all the branches of an art which conduces so much to the comfort and the pleasure of the community.

Resolved, That a copy of these resolutions, properly attested, be forwarded to the family of the late Mr. Downing, and that they be embodied in and published with the records of this Society.

The following gentlemen were chosen delegates to represent the Society at the Fair of the American Institute, to be held in New-York, in October:—

Joel Rathbone, V. P. Douw, Herman Wendell, B. P. Johnson, J. McD. McIntyre, B. B. Kirtland, Wm. Newcombe, Erastus Corning, jr., Jefferson Mayell, James Wilson, W. A. Wharton, E. M. Van Alstyne, E. E. Platt and Elisha Dorr.

On motion of Mr. Mayell, it was resolved, that the President communicate to H. T. E. Foster, Esq., of Lakeland farm, Seneca co.; to Messrs. Ellwanger and Barry, of the Mount Hope nurseries, Rochester; to J. J. Thomas, Esq., of Macedon, Wayne co.; to John Morse, Esq., of Cayuga Bridge, and to H. K. Hart, of Whitestown, Oneida co., the thanks of the Society for the rich and valuable displays of fruit made by them respectively.

Old Tan a Remedy for the Potato Disease.—Owing to the prevalence of disease, I am again induced to recommend planting in old tan, which has proved the best and only remedy I have yet met with; and as a proof of my success, I grew nearly 60 bushels on this principle, and scarcely a bad potato was to be found, although planted on heavy clay soil. They were the admiration of all who saw them; while others planted in the same garden without tan were entirely destroyed. As a further proof of the excellence of this remedy, I was resolved last year, by way of experiment, to try them on the same ground without tan, and the result was that nearly half were bad. I write this after three years' experience, which has proved most satisfactory. I usually had the ground thrown up in ridges about November, and I allowed it to remain in that condition until the first week in February, when the sides were chopped slightly down, and about three inches of old tan put in between the rows; the sets were planted whole, and covered with tan and a portion of soil. There is likewise another advantage, viz: when the potatoes are dug, they leave the ground so clean that they require no rubbing, which assists their keeping.—*E. Bennett in London Mark Lane Express.*

Here is another proof of the virtues of *tannic* acid, which have been so harped upon. As a mulch in heavy soils and as a means of retaining moisture, and a covering for tender plants in winter, tan will no doubt be found useful. The effect produced above is unquestionably owing to the soil being kept light and freely permeable to the atmosphere, rather than any constituent of the tan itself.

Effects of Drainage on the temperature of the Soil.—All the rain that falls upon our fields must either be carried away by *natural* or *artificial* drainage, or, having thoroughly saturated the soil on which it falls, be left upon the surface to be carried off by evaporation. Now, every gallon of water thus carried off by evaporation, requires as much heat as would raise five and a half gallons from the freezing to the boiling point! Without going to extreme cases, the great effects of the heat thus lost upon vegetation cannot fail to be striking, and I have frequently found the soil of a field well drained, higher in temperature from 10° to 15° than that of another field which had not been drained, though in every other respect the soils were similar. I have observed the effects of this on the growing crops, and I have seen not only a much inferior crop on the undrained field, but that crop harvested fully three weeks after the other, and owing to this circumstance and the setting in of unsettled weather, I have seen that crop deteriorated fully ten per cent in value. *B. Simpson, in Journal of Royal Ag. Society.*

A Card from Mr. McCormick.

Mr. Editor—I beg leave to say through the forthcoming No. of the "Cultivator," that it may appear with your notice of the *awards* of the Committee of the State Agricultural Society, made at the *Geneva* trial of Reapers and Mowers—that in the *detailed report* of facts made by said committee, together with some other *facts* known to them—but especially in connection with certain other facts, perhaps not within their knowledge—the superiority of my machine over all others included in said trial, was abundantly *proved*—the *awards* of the committee to the contrary notwithstanding. When I say this, I mean not to impugn motives. I was not present either at the Geneva trial, or the Utica Fair, and the public are only concerned to know facts and results. Such only I propose to present, and such I ask them to consider; and, accordingly, I only request them to suspend any judgment in the premises until I have seen and commented upon the report and awards together, which I consider calculated to do the grossest injustice to myself and the public.

I will only at present add, that when it was made known to the

committee that the machine which I had provided for the Geneva trial, from being delayed on the way from Chicago, did not arrive in time for the trial, and in consequence of which an ordinary one had to be taken—which might not have been an average working machine, and which *same machine* I supposed would be *required at Utica*—I regret that, while the *workmanship* in it, as I understand, was made a ground of objection, the *explanation* was not given. I also regret, that, while at the firstt rial of *mowers*, the teeth of the sickle were raked off by the *stones on the surface of the ground* as fast as the sickles could be put in place, for an obvious reason [explained to the committee, as I understand]—the "fingers," or guards to the sickle edge being so wide apart as to let the stones to the edge, while *others* were closer together—and mine will be hereafter—not having, myself, previously thought of cutting grass on stony ground, as that was—I regret, I say, that some explanation of this had not been made by the committee, instead of charging all to the fragile construction of the machine!

With the expression of one other *regret* at this time, I conclude; and that is, that the committee, like your *reporter*, did not, as they at one time proposed to do, enlighten the public as to the character or claims to novelty and utility, of the several machines exhibited—*which might, in some cases, have prevented imposition upon the public.* Very respectfully your obedient serv't. C. H. McCORMICK.

P. S.—Since the foregoing was written, I have been informed that a member of the said committee who attended the *trial at Geneva*, and was prevented by sickness from attending the *Utica Fair*, (where the awards were made up,) was "surprised" at the awards made, and was decidedly of the opinion that my Reaper was entitled to the first premium. But more anon. C. H. McC.

New-York, Sept., 28, 1852. Oct. 1—1t

Certificate.

We, the undersigned, certify that we have sold to Mr. S. W. JEWETT, of Vermont, America, of pure blood Merino Ewes, of our own raising, much more in number, and for a much greater value in money, than to all other American purchasers. GUERIN,
CUGNOT,
Poissy, France, April 7, 1852. VICTOR GILBERT.

WM. R. PRINCE & CO., refer to their advertisement in the September No, and desire simply to add that they will sell off their great stock of Trees, &c., only at private sale; and such Nurserymen and others as may desire a long credit, will be fully accommodated if the payment is made sure with interest. Approved notes and mortgages will be taken in payment.

Linnæan Garden and Nurseries, Flushing, N. Y., Oct 1—1t.

Trees, Plants and Shrubs

SHOULD be transplanted South in the fall. Orders supplied from the best nurseries, at their prices. A. B. ALLEN & CO.,
Oct. 1, 1852—1f. 189 and 191 Water st., New-York.

Fruit and Ornamental Trees.

THE subscribers would beg leave to give notice to dealers and others purchasing Pear Trees, that their stock is remarkably well grown this season, and will be very strong and fine for the fall sales, and is as extensive a collection of saleable trees as can be found at any other nursery in the county. The collection grown on quince stock is also very fine.

The stock of Apple Trees will also be very large this fall, in lots to suit purchasers.

Plums—a general assortment of most of the leading kinds.

Cherries, Apricots, Peaches, Grapevines, Gooseberries, Currants, with other small Fruits, at the lowest market prices.

Ornamental Trees, being also grown extensively, can be furnished by the hundred at very reasonable rates—European Linden, Mountain Ash, Scotch Elms, English Elms, Horse Chestnuts, with a good collection of Roses, &c. Catalogues will be forwarded to all applicants. WILSON, THORBURN & TELLER,
Oct. 1—2t. Nurserymen, No. 492 Broadway, Albany.

Cranberry Vines.

THE variety cultivated mostly in New-England are hardy and prolific.

They can be raised on upland, on rather moist loam—but do the best on low, damp or moist *meadow land*, with a little sand put around the plant.

They may be planted out 1½ to 2 feet apart, each way.

Two feet apart, it will take 10,000 plants to the acre; if on low ground, it should be pared, plowed, or burnt over, to take out the grass or weeds, and cultivated for one or two years, until they cover the ground. The yield after that is from 150 to 250 bushels per acre.

Also, all kinds of Trees, Plants, &c. For sale by F. TROWBRIDGE, New-Haven, Conn. Oct. 1, 1852—1t.

For Sale.

ONE of the most desirable farms in the Chenango Valley, 2 miles from the village of Oxford, containing 220 acres—river flat—grain land, pasture, woodland, and orcharding. A large and convenient dwelling house, two large sheds and out-houses—watered by the Chenango River—a creek on which there is a saw mill, and by never failing springs. On it are more than 700 rods of stone wall. Persons wishing to purchase are desired to look at the crops and stock on the farm. Enquire of JOHN TRACY, Oxford, N. Y.

Oct. 1, 1852—3t.

SENECA LAKE HIGHLAND NURSERIES,
Catharine, Chemung County, N. Y.

ALL applicants by mail will be furnished gratis, with a general Descriptive and Price Catalogue of this extensive establishment.

Packages amounting to $10, will be forwarded to New York or Dunkirk, or any intermeinte station on the New-York and Erie Railroad, free of charge to purchasers.

My extensive trade with Eastern, Southern, and Western planters and dealers, has induced me to perfect this arrangement.

With seedlings of other fruits, 75 thousand Cherry stocks can be furnished. E. C. FROST.

Oct. 1, 1852—1t.

ANDRE LEROY, Nurseryman at Angers, France,

HONORARY and Corresponding member of the principal Horticultural Societies of the United States, and of Europe, begs leave to inform his friends, and all the nurserymen of the Union in general, that he has made large preparations, and has now on hand a considerable stock of all the finest Evergreen Seedlings, Roses, Fruit and Ornamental Trees, &c., &c., most suitable for the American markets. The experience of several years of putting up large orders for the United States, enables him to flatter himself that he has now all the necessary knowledge to give full satisfaction, and to assure the delivery in good order, of all the trees, &c., ordered.

He also begs to inform all nurserymen who have not already received the Supplement for 1852. to his Catalouge of 1851, that it can be obtained free of any charge, at his agent's office, M. Ed. Bossinge, 138 Pearl-Street, New-York, who will also attend to forward all orders sent to him, and to pass through the custom house, and to reship all goods ordered, without any delay, and with the greatest care.

Address M. ANDRÉ LEROY, Angers, France,
Care of M. ED. BOSSANGE, 138 Pearl-Street, N. Y. Oct. 1—3t.

S. MOULSON, Old Rochester Nursery,
Office 36 Front-St. Rochester, N. Y.

20,000 Northern Spy Apple trees, 6 to 8 feet high, *transplanted*, at 37½ cents each, or $25 per 100.
50,000 most popular varieties of Apple, at 25 cents each, or $18 per 100.
1,000 Dwarf Apple, at 37½ cents each.
60,000 Dwarf Pear, at 50 cents each.
20,000 Standard Pear, at 50 cents each.
20,000 Standard and Dwarf Cherry, at 50 cents each.
10,000 Giant Rhubarb, at 25 cents each—$2 per dozen, or $60 per 1,000, best variety for market gardens.

Also a large assortment of Apricot, Peach, Nectarine, Strawberries, various sorts of Nuts, &c., &c.

50,000 Osage Orange for hedges, at $10 per thousand, or $6 for 500.
Hedge plants in great variety.
50,000 Norway Spruces 2 years old, at $5 per 100.
20,000 do 3 do $10 to 12 per 100.
20,000 Mountain Ash, 2 years old—seedling at $20 per 1000 or $12 for 500.

Bulbous flowering roots of various sorts, together with a large assortment of hardy items, comprising everything requisite for open ground culture in this climate.

Lists of leading items forwarded to post-paid applicants enclosing a one cent postage stamp for under 500 miles, and two cents for over.

Packing done in the best manner.

Orders solicited by mail or otherwise. Oct. 1—1t.

FOR SALE.

A FEW Buck Lambs, from a French Merino Buck, imported by J. A. Taintor, and out of full blooded American Merino Ewes. These Ewes dropped their Lambs in Feb. and March, and sheared 4 lbs. 13½ oz. per head, of clean washed wool, which we sold last year for 44½ cents per lb. These lambs are well formed, and weigh from 85 to 100 lbs. To wool growers who wish to grow a fine grade and heavy fleece, we would invite them to give us a call.

L. & A. WHITING,
Oct. 1—1t. Torrington, Litchfield County, Ct.

CONICAL MILL.

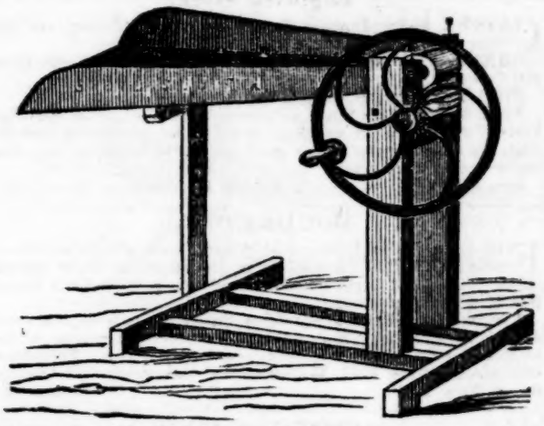
IMPORTANT TO FARMERS.—Oaklands, near Geneva, 28th August, 1852. Mr. Chas. Ross—Dear Sir: In reply to your letter of the 25th instant, it is a pleasure to speaki n commendation of your Patent Conical Mill. to me it has proved valuable for grinding food for my stock, as a few hours labor with this machine, prepares food sufficient for fifteen head of cows for several days.

The Mill used by me prepares food for horses, sheep, and swine, grinding, and mixing corn, oats, and other grain satisfactory. It has also produced for my family use, our Indian meal, buckwheat meal, and occasionally wheat flour, thus saving the time of teams and men which otherwise must have been occupied, going several miles to a distant mill, at much expense—it is therefore a source of economy, as well as an inducement to a better care of all stock—it affords, also, one among other resources for convenient and useful labor during stormy weather—my belief is that your mill will work its way into general use upon farms where stock is raised, and where grist mills are not within a short distance.

In my estimation, this mill is among the most important machines offered to the farmer. Respectfully yours, J. DELAFIELD.

N. B.—The Conical Mill has been in use by Mr. Delafield on his farm, for nearly four years.

Any further information relative to the Conical Mill, can be obtained by letter, post paid, or by calling at the factory of
CHARLES ROSS,
2d story, Phœnix Building, Acqeduct Street, nearly opposite the Arcade, Rochester. Oct. 1, 1852—1t.



Patent Spiral Hay, Straw and Corn Stalk Cutter.

THE attention of the public is respectfully called to our

NEW SERIES

HAY, STRAW, AND STALK CUTTERS,

WITH ADJUSTABLE SPIRAL KNIVES.

Having long been engaged in the manufacture and sale of Hay and Straw Cutters, of various kinds, we claim to have had experience sufficient to warrant us in asserting it as a fact, that the spiral form for knives, upon a cylinder for cutting by pressure upon a roller, are the only proper form, and the only kind of cylinder cutter built upon philosophical or mechanical principles—not only in theory but in practice, while they are the most simple, most easily adjusted and easiest operating machine; their capacity and strength is much greater in proportion to their weight and cost, than any cylinder cutter without the spiral knives, and as now made by us in our

"NEW SERIES,"

the knives are adjustable and readily taken out if necessary, and ground and regulated separately; which gives them a decided advantage over most other kinds in market.

The recent improvement in the construction of this knife cylinder which instead of being made with flanges is simply the flanges themselves, sitting quite to the center of the axis and admitting the knives to the bottom—thus forming the knife cylinder of a diameter equal to the width of two knives only—thereby lessening the circumference and distances between the edges of the blades in proportion, and enabling our new cutter with six blades to cut as short as the old kinds with 12 blades—thus forming an angle between the blades of our improved cutter with six knives of 60°, while in the old series, with 12 blades the angle is only 30°, which, in cutting any kind of substance, makes our new cutter the easiest operating and always cleaning itself, while the old patterns with the small angle will frequently clog, and never would cut hard or damp substances with ease.

The following extracts are from the report of the Judging Committee, on NEW INVENTIONS AND MACHINERY, of the Worcester County Mass. Mechanic's Association, at their fair in September, 1851, on this late improvement in knife cylinders of Wm. Hovey's.

"By a new mechanical arrangement, he has reduced the diameter "of his cylinder and increased the twist of his knives, by which ar- "rangement the power required to operate the machine is much re- "duced and a less number of knives are required to cut feed of equal "length of those previously made. The committee, therefore, are of "opinion that this improvement on this cylinder of knives will be of "more importance to the public than anything which has been made "since its first application to cutting on a roller."

As most other manufacturers have followed each other's numbers and prices in their lists, without regard to the size of each other's machines, their capacity, number and length of knives or other parts; and as our new series differ in every essential point it becomes necessary to adopt a distinct series of marks or numbers, and at the same time assure our patrons that every cutter in the "new series" of numbers, when compared by prices, will be found of from thirty to fifty per cent greater capacity than those of like prices of other manufactures; to say nothing of the adjustable arrangement of the knives. These Cutters need only to be seen side by side of our old patterns, and those of other makers, to be at once adopted

Beside the above improved adjustable cutters, we have the Common Spiral Hay Cutters of our own manufacture, and warranted of the best materials and workmanship which are offered as low and is possible, and leaving a paying margin. For several years the competition in this kind of cutter, has been so great that their manufacture has been improfitable even if a paying business and several large manufactures have abandoned them and turned their attention to the manufacture of the straight knife sett diagonally upon the cylinder, and by lessening their cost and capacity while the same marks and numbers of the others are retained, they are enabled to make better terms and profits on them, the result of which has been a very extensive sale in some sections of the country. They claim for them the advantage of being more easily kept in order by the farmers themselves, than the spiral knife. Notwithstanding, we have them constantly on hand for the trade, on as good terms as any other dealers, we will say that so far as keeping the two kinds in order, the spiral knife will not require half as often grinding as the straight knife, and which is, on an average, once in three years, and any machinest can grind and regulate either kind for fifty cents, while a farmer cannot regulate the straight knife at all, owing to its construction, thus proving conclusively our adjustable Spiral Knife Cutter superior to all others.

By examining closely this list and comparing the length of the knives, and the length of the cut feed, with the prices of other Cylinder Cutters, without regard to the marks and numbers on the machines, it will be seen that our New Series of Cutters are from 30 to *50 per cent greater capacity, and less in price, than any other Cutter in market.*

In the table of Old Series, the numbers, prices, and sizes correspond with those of all other makers of straight and spiral cutters.

NEW SERIES.

Adjustable Spiral Knife Cylinder Hay Cutter.

Sizes.	Length of blades and Cylinder.	Length of Straw cut.	Prices at retail.
No. 10	5¾ inches.	1¼ inches.	$6 50
15	5¾ do	1 do	7 50
20	6¼ do	1¼ do	8 50
25	6¼ do	1 do	9 00
30	7¼ do	1¼ do	10 50
35	7¼ do	1 do	11 50
40	8¼ do	1¼ do	13 00
45	8¼ do	1 do	14 00
50	9¼ do	1¼ do	16 00
55	9¼ do	1 do	17 50
60	10¼ do	1¼ do	20 00
65	10¼ do	1 do	22 00
70	11¼ do	1¼ do	25 00
75	11¼ do	1 do	27 50
80	12¼ do	1¼ do	30 00

All of New Series fitted for horse power.

OLD SERIES.

Spiral and Straight Knife Cylinder Hay Cutter.

Sizes.	Length of blades and Cylinders.	Length of Straw cut.	Prices at retail.
0	5¾ inches.	1¾ inches.	$7 00
1	5¾ do	1¾ do	8 00
2	5¾ do	1¼ do	9 00
3	6¼ do	1¼ do	10 00
4	6¼ do	1¼ do	11 00
5	6¼ do	1 do	12 00
6	7¼ do	1¾ do	14 00
7	7¼ do	1¼ do	15 00
8	7¼ do	1 do	16 00
9	8¼ do	1¾ do	17 00
10	8¼ do	1¼ do	18 00
11	8¼ do	1 do	19 00
12	9¼ do	1¾ do	22 00
13	9¼ do	1¼ do	24 00
14	9¼ do	1¼ do	26 00

Nos. 12, 13, and 14, are fitted for horse power.

For further particulars consult our Illustrated Catalogue, or address

EMERY & CO., Albany Agricultural Works,

Warehouse and Seed Store, 369 & 371 Broadway, Albany, N. Y.

Straw Cutters! Straw Cutters!

A LARGE assortment of the best makes, viz: Forbes & Dones', Stevens', Clintons', Hovey & Co., and Hovey & Lazell's; Stalk Cutter's of Bentholf's, Sinclair and Bott's patent, at manufacturer's prices. State Agricultural Warehouse.

Sept. 1—2t. LONGETT & GRIFFING, No. 25 Cliff Street.

A First Class Dairy Farm for Sale.

MY farm of 320 acres, four miles south of the village of Oxford, Chenango county, N. Y., and near the Chenango Canal. 250 acres are under high cultivation, durably fenced, and well and permanently watered. The remainder is well timbered. It has a large two story mansion, five large barns, and sheds and out houses, in good repair. The soil is deep and of superior quality. It is admirably adapted for a dairy, or for grazing and grain; has a fine orchard of choice grafted fruit; and for profit, health, and beauty of location, cannot be surpassed. It is fully supplied with farming tools, and about fifty head of cows and young stock, all or any of which may be had with the farm. The New-York and Erie Railroad furnishes ample facilities for forwarding produce to the New-York market at all seasons, and the route of the contemplated Albany and Binghampton railway, passes within a few miles of the farm. The farm can be conveniently divided. Price low—title perfect. Terms most easy.

G. VAN DER LYN,

May 1, 1852—tf. Oxford, N. Y.

Agricultural Books

OF all kinds, for sale at the Cultivator Office, 395 Broadway, Albany.

United States Agricultural Warehouse and Seed Store,

No. 197 Water Street, New-York.

THE subscribers solicit the attention of the public to the large and varied assortment of Agricultural and Horticultural Implements, Field and Garden Seeds which they have constantly on hand, and offer for sale at the lowest prices and on the best terms.

Aug. 1—tf. JOHN MAYHER & CO.

Hay and Straw Cutters,

OF all styles and sizes, for cutting Hay, Straw, or Cornstalks; for sale at the United States Agricultural Warehouse and Seed Store, No. 197 Water Street, N. Y. JOHN MAYHER & CO.

Sept. 1—tf.

Seed Wheat.

GOLDEN Australian, Mediterranean, White Flint, Canada, Black Sea, Soul's, in bags or barrels. For sale at the United States Agricultural Warehouse and Seed Store, No. 197 Water Street, New-York. JOHN MAYHER & CO.

Sept. 1—tf.

Super Phosphate of Lime,

FOR farming purposes, put up in bags of 150 lbs. each. For sale by JOHN MAYHER & CO.

Sept. 1—tf. No. 197 Water Street, New-York.

Great Sale of Superior thorough-bred Short-Horn Cattle.

THE subscriber will offer for sale, his entire herd of choice Short-horns, comprising 50 head, young and old, at public Auction, on Wednesday the 13th of October, 1852, at 1 o'clock, P. M., at his farm 2½ miles from the city of Troy; reserving to himself one bid on five Cows and Heifers and one Bull, say six head in all, and these to be pointed out previous to the commencement of the sale; this bid will be made public when the six animals are brought to the stand for sale. Should any gentlemen advance on the single bid made by the proprietor, the highest bidder will be entitled to the animal. It is proper to say, the severe drouth in this vicinity reducing the hay crop one half, has decided the proprietor to make this sale at the time named, instead of next June, which he had purposed to do.

The well established reputation of this herd in this Union, and in Canada, and the splended herd it has measurably sprung from, viz: the famed herd of that eminently English breeder the late Thomas Bates, Esq., renders it hardly necessary to comment upon its superior merits. It may not, however, be inappropriate to remark, that the establishment of this herd was commenced in 1838, and that the most careful attention has since been paid to its breeding, and that it now contains mostly all the reserved stock of two former public sales. And besides these he has now on the passage across the Atlantic, shipped 21st June, on board the Packet Ship Kossuth, Capt. Jas. B. Bell, a superior yearling roan Bull, having many crosses of the famed Duchess Bulls of Mr. Bates. Including this latter animal and the two beautiful red roan three year old Heifers, which came out from England last September, "Yarm Lass" and "Yorkshire Countess," and the beautiful Heifer Calf of the latter animal, got in England by the Duchess Bull 5th Duke of York, there will be 14 head of this imported stock, and its immediate descendants. There has been sold from this herd but three Heifers from these importations, and these cows were sold at $300 each. All the young bulls bred from these cows, except those now offered for sale, have also been sold at private sale, at $300 each, most of them while quite young.

Besides these 14 head of high bred animals, the noble premium cow Esterville 3d, bred by E. P. Prentice, Esq., of Albany, and the equally fine two year old, red and white Heifer bred by me, got by the Bates Bull Meteor, and three of the famed milking Willey tribe, the same tribe of cows as the Heifer Ruby, sold by me to Mr. S. P. Chapman of Madison county, and which cow was awarded the first premium by the N. Y. State Agricultural Society, for producing the largest quantity of butter in 10 days in June, and 10 days in August, on grass pasture only, being a fraction over 40 lbs. in those 20 days. There are other valuable tribes in the herd, as the printed Catalogue will show.

The catalogue will be ready for distribution about the 1st of August, and will exhibit richness of pedigree rarely to be met with, showing the descent of most of the animals, from the best animals on record in the English herd book. Having received an invitation from H. Strafford last winter to forward a list of the pedigrees of my herd to be inserted in the forthcoming volumes of the English herd book, of which Mr. Strafford is now the editor, several pedigrees were sent to him of the animals here offered for sale, and will appear in said book.

A credit of 9 months will be given on all sums up to $300, and 9 and 18 months on all sums over $300, for approved paper, with interest, payable at some bank in this State. GEO. VAIL.

Troy, N. Y., Aug. 1—3t.

Valuable Farm for Sale.

THE subscriber offers for sale four hundred and fifty acres of land, being a part of his homestead, and comprising two hundred acres of as desirable land as any in Addison county—lying on the main road four miles north of Vergennes on the border of Lake Champlain, and one mile from the Railroad Station. It is under good cultivation, and furnished with commodious buildings. The remaining 250 acres is wood land; a portion of it covered with a heavy growth of hemlock and other valuable timber, and the remainder with the best quality of wood for fuel. The property will be sold together or in parcels. Postpaid inquiries promptly responded to.

ROW'D T. ROBINSON,

Aug. 1—tf. Ferrisburgh, Addison co., Vt.

Improved Stock.

CATTLE, of the Durham, Devon, Hereford, Alderney, and Ayrshire breeds.

SHEEP, of the Native and French Merino, Saxony, South-Down, and Cotswold.

PIGS of the Lincoln, Suffolk, and Berkshire breeds.

From our long experience as breeders and dealers in the above kinds of stock, and our excellent situation for purchasing and shipping, we think we can do as good justice to orders, as any other house in the United States. A. B. ALLEN & CO.,

Jan. 1, 1852—tf. 189 and 191 Water st., New-York.

POUDRETTE,

FOR Grass Lands, Lawns, and Winter Grain, also for shrubs—for sale by the Lodi Manufacturing Company, in lots to suit purchasers. Price $1.50 per barrel, for any quantity over six barrels. For *Shrubs*, $2 per barrel.

☞ The Company will sell lots of 100 barrels or over, at a reduced rate this fall, as they are making extensive alterations in their buildings, which will compel them to empty their vats. For particulars address "The Lodi Manufacturing Company," 74 Cortlandt Street, New-York. Sept. 1—2t.

EMERY & CO.'s

Improved Horse Power. Thrashers and Separators.

THE undersigned have been appointed sole agents for the sale of Emery's new patent Improved Horse Power, Thrashers and Separators in the city of New-York. The State Agricultural Warehouse is the only Depot where this superior power can be had. As many powers are represented as Emery's patent, to avoid impositions, be careful to observe that the name of Emery & Co., is cast in full on every link of chain and the wheel hub.

LONGETT & GRIFFING.

July 1—tf. 25 Cliff street, New-York.

FOR SALE,

50 EWES and a few Bucks from my flock, the wool of which has sold, for the last three years, for forty-seven cents a pound, and averaged from three and one half to three and three-fourth pounds per head.

For further particulars, address the subscriber at his residence, Canaan Centre, Columbia county, N. Y., or Blanchard and Burt of the Wool Depot, Kinderhook. DANIEL S. CURTIS.

Canaan Centre, Aug. 1, 1852—tf.

WATER WHEELS.

THE subscribers are making with success, Jagger's improved FRENCH TURBINE WATER WHEEL.

Tables showing the power and capacity of the same can be had on application. JAGGER, TREADWELL & PERRY,

Eagle Foundry and Machine Shop,

May 1, 1852—6t. No. 110 Beaver st., Albany, N. Y.

STOVES.

THE subscribers are prepared to furnish dealers with a full assortment of PARLOR and COOKING STOVES for coal and wood, on liberal terms.

Circulars giving particulars can be had on application.

JAGGER, TREADWELL & PERRY,

Eagle Foundry, No. 110 Beaver st., Albany, N. Y.

May 1, 1852—6t.

Albany Drain Tile Works.

No 60 Lancaster Street—West of Medical College, Albany.

THE subscriber has now on hand, Draining Tile of the following descriptions. Prices reduced.

Horse Shoe Tile.

5½	inch Rise, or	4½	inch Calibre,	$18 00	pr. 1000.
4½	" "	3½	"	15 00	"
3½	" "	2¾	"	12 00	"

Sole Tile.

4½	inch Rise, or	3½	inch Calibre,	$18 00	pr. 1000.
3½	" "	2¾	"	12 00	"

These Tile are over one foot in length, and are so formed as to admit water at every joint, draining land from 12 to 20 feet each side of the drain—being the cheapest and most durable article used.

Tile sufficiently large for drains around dwellings, at $4 and $8 pr. 100 pieces. Orders from a distance will receive prompt attention.

Albany, April 1, 1852—tf. JOHN GOTT.

New and Important Insurance.

Northern N. York Live Stock Ins. Co., Plattsburgh, N. Y.

INCORPORATED by the Legislature of the State of New-York, July, 1851. Horses, Cattle, and all kinds of Live Stock insured against Death, by the combined risks of Fire, Water, Accidents, Diseases, &c. CAPITAL, $50,000.

GEORGE MOORE, Plattsburgh, Sec'y.

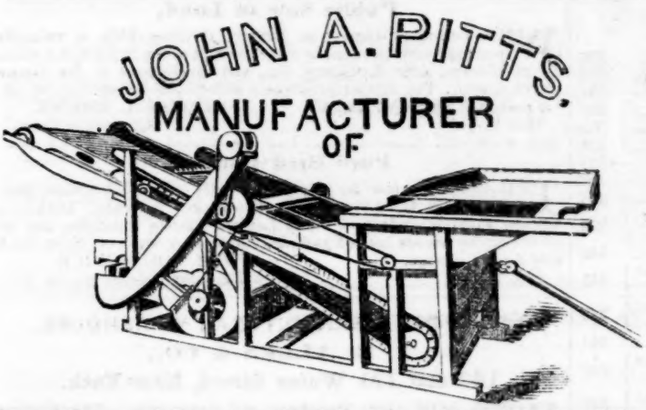
I. C. Mix, Fort Ann, Gen. Agent.

October 13, 1851.

This company are now organized and ready to receive applications for insurance. It is confidently believed that the owners of valuable animals will avail themselves of the advantages offered by this mode of protection. If fire, life and marine insurances are proper and expedient, so is live stock insurance: the reasons for insurance are equally applicable to all.

For terms please apply to Company's Agents.

Plattsburgh, July 1—tf.



PITTS' PATENT SEPARATOR

AND

DOUBLE PINION HORSE POWER.

OWING to the increased demand, and being desirous of locating at a convenient point for shipping, I have removed to Buffalo, N. Y., and have erected a large establishment for the purpose of manufacturing the above celebrated Machines, for threshing and cleaning grain at one operation.

This is the same Machine that has stood, and now stands, unsurpassed by any Machine in existence for the above purpose. It has been exhibited at nearly all the State and County Agricultural Fairs throughout the United States, and always received the *first premium*.

The Machine has recently been much improved, enlarged, and rendered more substantial in all its parts. I therefore offer it to Farmers of the different wheat growing districts, to be all I claim for it, viz. *the best Machine* for threshing and cleaning grain, now in existence.

I also manufacture Pitt's Improved Endless Chain Two Horse Power and Separator—also Pitt's Corn and Cob Mill, for grinding feed for stock.

My Horse Powers and Separators are all warranted to be a better article than can be purchased at any other shop—and if they do not, on trial, prove to be so, I will take them off the hands of the purchasers at the price they may pay me for them.

P. S.—The Patent Right on the Separator has recently been extended for a further term of seven years, and all *infringements* on *said right* will be dealt with according to law.

JOHN A. PITTS.

Buffalo, N. Y., July 1, 1852—4t.

Balsam Firs, Arbor Vitæ, and other Forest Trees.

HENRY LITTLE & CO., of Bangor, Maine, will furnish any number of Evergreen and other Forest Trees, taken up with *earth on the roots*, with the greatest care, and sent to any part of the United States by Steamers or Railroad—and carefully packed in large boxes, at short notice, at the following prices, viz:

From 6 inches to 1 foot, at 1 cent, or $10 per 1000.

From 1 foot to 2 feet, at 1½ cents, or $15 per 1000.

The above prices refer more particularly to Balsam Fir and Arbor Vitæ Trees.

We charge what the boxes cost, but nothing for packing.

For three years past, the trees we have procured and sent to a distance, have lived generally, and have given good satisfaction. Evergreens will not live unless taken up with great care.

Bangor, Sept. 1, 1852—2t.

SYRACUSE NURSERIES.

Thorp, Smith, Hanchett & Co., Proprietors, Syracuse, N. Y.

OUR Nursery grounds, amongst the largest and most extensive in the country, are now covered with a most beautiful stock of fruit and ornamental trees, shrubbery, roses, greenhouse plants, &c. We therefore invite particular attention to our stock of trees, which cannot be excelled in size, thriftiness and beauty, by those of any other establishment in the Union. *Nurserymen, Amateurs, Orchardists, and Venders*, are earnestly invited to call, examine, and judge for themselves.

Apples.—We have a very extensive assortment of all the best varieties in cultivation, both Dwarf and Standard.

Pears.—Our stock of Standards and Dwarfs is much better than heretofore, and we invite competition, as no finer can be produced. We have also, a few hundred Dwarfs, five years old, filled with fruit spurs, and which have borne freely the past two years, (now with a full crop.) that we will supply to those persons desiring fine fruit bearing trees.

Cherries.—Both Standard and Dwarf of all the newest and finest sorts, that cannot be excelled for beauty and thriftiness.

Plums, Peaches, Apricots, Nectarines, Currants, including *Victoria* and *Cherry*, and *English Gooseberries* of all the best leading sorts.

Our Ornamental Trees are of fine form and luxuriant growth and require only to be seen, to be admired.

Evergreens.—A fine assortment of Norway and Balsam Firs, Spruce, &c.

Pæonies.—A splendid collection of both tree and herbaceous varieties.

Dahlias.—Over 150 choice selected kinds, 25 cts. per whole roots

Roses.—One of the largest stocks in the country, of all the leading varieties, being about 10,000 plants.

Bulbous Roots.—A splendid collection just imported from Holland, of best double Hyacinths, Tulips, Crocus, &c &c.

Greenhouse Plants.—A large collection of the choicest and newest kinds, including the *new Heliotropes, Reptans de Santana, Erringii, Hoyas Bidwelliana, Imperialis and Bella*, &c.

Fuschias in 50 varieties, including *Spectabilis, Eliza Melliez, Sir John Fastolff, Serratifolia, Prince of Orange, Pearl of England, Caroline*, &c.

Chrysanthemums.—A full assortment of all the best standard kinds in the country. Of the new Dwarf and Daisy varieties we have every thing new and rare, including 30 of the very best sorts.

Verbenas.—A splendid collection of 50 varieties including Hovey's New Seedling.

Strawberries.—All the best varieties including the three new Cincinnati sorts, one of which took the $100 premium.

Hedge Plants.—Buckthorns, Privet, Red Cedar and Osage Orange

Seedling Stocks.—Nurserymen and others can be supplied with Apple, Pear, French Quince, Mahaleb, Doucain, and Paradise stocks by giving us notice in due time. The *fall* is the best time to ship trees to the South and West.

Our Catalogues, with full descriptions and prices, will be forwarded to every post-paid applicant, enclosing one letter stamp if under 500 miles and three stamps if over that distance.

Sept. 1—2t. THORP, SMITH, HANCHETT & CO.

Horse Powers, Threshers and Separators.

Endless Chain Powers

OF all kinds ever made, for one and two horses, also cast iron Sweep Powers, for one to four horses. Threshers and Separators to match the above. JOHN MAYHER & CO.,

United States Agricultural Warehouse and Seed Store,

Sept. 1—tf. No. 197 Water Street, New-York.

Fruit and Ornamental Trees.

River Bank Nursery, Rochester, N. Y.

SHEPPARD & CHERRY, Proprietors,

NOW offer to furnish Nursery stock generally, of as good quality and at as low rates, as can be obtained elsewhere.

FRUITS.—All the leading varieties, both standard and dwarf, of Apple, Cherry, Peach, Pear, Plum, &c., &c. Gooseberries, Currants, Raspberries, Strawberries, &c. Grapes—Isabella, Catawba, Clinton, &c., &c.

Also 100,000 Apple Stocks.
20,000 Cherry do root pruned.

All orders accompanied with the cash or satisfactory reference, and all letters of inquiry post-paid, will receive prompt attention.

From the connection of Mr. Sheppard for a number of years, with the following establishments, all of which sustain the highest reputation, viz: A. J. Downing & A. Saul, Newburgh, N. Y.; Wm. Reid, Elizabethtown, N. J., and Ellwanger & Barry, Rochester, N. Y., the proprietors flatter themselves that their knowledge of the great variety of tastes and wants of planters generally, will enable them to guarantee ample satisfaction to all favoring them with their patronage.

Rochester, Sept. 1, 1852—2t.

FRUIT TREES, SEEDLINGS, &c.

T. C. Maxwell & Co., Geneva, N. Y.

ENCOURAGED by the generous patronage heretofore received, and by a soil, climate, and position peculiarly favorable to the growth of *healthy* trees, we have so enlarged our stock of nursery articles, that we are now enabled to offer great inducements to all who may wish to purchase, either at wholesale or retail. We have between *five and eight hundred thousand* trees, in the different stages of growth, which have been propagated with the strictest care as to merit and genuineness of varieties.

Orders by mail, or otherwise, promptly attended to, and trees securely packed and delivered at the Railroad Depot or Steamboat.

Of large trees, we offer this fall the following, viz:

60,000 *Apple Trees*, best varieties for market or family orchards.
30,000 *Cherry* do very thrifty and handsome.
6,000 *Pear* do standards—healthy and large.
20,000 do do dwarfs, on True Angers quince—one and two years old.
10,000 *Peach* do very nice.
4,000 *Plum* do 5 to 7 feet high—best sorts.
2,000 *Apricot* do mostly Dubois' Early Golden.
2,000 *Grape Vines*, mostly Isabella.
10,000 *Evergreens*, Balsam Fir, Cedars, Norway Spruce, &c.
5,000 *Mountain Ash*, large and fine—*very cheap.*
3,000 *Horse Chestnut*, large and handsome.
40,000 *Cherry Seedlings*, very nice.
20,000 *Apple* do two years old.
25,000 *Buckthorn Seedlings*, very nice for hedges.

Also Hybrid Perpetual, Climbing, and Moss Roses, Shrubs, Gooseberries, Currants, Raspberries, Strawberries, &c., &c.

Particular attention is called to our large stock of the following fruits, viz:

Apples—Wagner, Tompkins County King, Northern Spy, Primate.
Pears—Virgalieu, Bartlett Louise Bon de Jersey, Glout Morceau.
Cherries—Great Bigarreau, Black Tartarian, Bauman's May, Early Purple Guigne.
Apricots—Dubois' Early Golden, Moorpark.

Geneva, Sept. 1, 1852—2t.

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Superphosphate of Lime.

THE GENUINE ARTICLE, manufactured by Professor Mapes, also C. Deburg's No. 1—with printed directions for their use, in bags of 150 pounds each. Farmers and Gardeners will do well to apply to us, as we keep none but the *genuine unadulterated* article.

A. B. ALLEN & CO., 189 and 191, Water-st., New-York.

Oct. 1—tf.

NURSERY OF J. J. THOMAS.

Macedon, Wayne County, N. Y.

ALL Fruit Trees sold at this Nursery are propagated from trees proved in bearing, and a selection of the best sorts made out of nearly *one thousand* proved varieties.

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THE CULTIVATOR

Is published on the first of each month, at Albany, N. Y., by

LUTHER TUCKER, PROPRIETOR.

$1 per Ann.—7 Copies for $5—15 for $10.

☞ All subscriptions to commence with the volume, (the Jan No.,) and to be PAID IN ADVANCE.

Advertisements.—The charge for Advertisements is $1 for 12 lines, for each insertion. No variation made from these terms.